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(21) International Application Number: PCT/US98/06956 (22) International Filing Date: 10 April 1998 (10.04.98) (30) Priority Data: 08/837,312 10 April 1997 (10.04.97) US (71) Applicant: GENETICS INSTITUTE, INC. [US/US]; 87 CambridgePark Drive, Cambridge, MA 02140 (US). (72) Inventors: JACOBS, Kenneth; 151 Beaumont Avenue, Newton, MA 02160 (US). MCCOY, John, M.; 56 Howard Street, Reading, MA 01867 (US). LAVALLIE, Edward, R.; 113 Ann Lee Road, Harvard, MA 01451 (US). RACIE, Lisa, A.; 124 School Street, Acton, MA 01720 (US). MERBERG, David; 2 Orchard Drive, Acton, MA 01720 (US). TREACY, Maurice; 93 Walcott Road, Chestnut Hill, MA 02167 (US). SPAULDING, Vikki; 11 Meadowbank Road, Billerica, MA 01821 (US). AGOSTINO, Michael, J.; 26 Wolcott Avenue, Andover, MA 01810 (US). (74) Agent: SPRUNGER, Suzanne, A.; Genetics Institute, Inc., 87 CambridgePark Drive, Cambridge, MA 02140 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>Without international search report and to be republished upon receipt of that report.</i>
(54) Title: SECRETED EXPRESSED SEQUENCE TAGS (sESTs)		
(57) Abstract Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.		

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DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

SECRETED EXPRESSED SEQUENCE TAGS (sESTs)

5 FIELD OF THE INVENTION

The present invention provides novel polynucleotides which are expressed sequence tags (ESTs) for secreted proteins.

BACKGROUND OF THE INVENTION

10 Gargantuan efforts have been employed by various investigational projects to randomly sequence portions of naturally-occurring cDNAs. The rationale behind this approach to identification and sequencing genes is founded in two basic principles: (1) that transcribed cDNAs represent the product of the most important genes, namely those that are actually expressed *in vivo*, and (2) that efforts to sequence genes and other portions of the genome of 15 target organisms which are not actually expressed wastes substantial effort on areas not likely to yield genetic information of therapeutic importance. Thus, the high-throughput sequencing efforts focus on only those portions of the genome which are expressed. The randomly produced cDNA sequences represent "expressed sequence tags" or "ESTs", which identify and can be used as probes for the longer, full-length cDNA or genomic sequence from which they 20 were transcribed.

Although this "shortcut" approach to genomic sequencing presents savings of effort compared to sequencing of the complete genome, it still produced a vast array of ESTs which may not be directly useful as protein therapeutics. To date, the majority of protein-related drug discovery has focused on the use of secreted proteins to produce a desired therapeutic effect.

25 Since the EST approach theoretically identifies all expressed proteins, it produces an EST library which contains a mixture of secreted proteins (such as hormones, cytokines and receptors) and non-secreted proteins (such as, for example, metabolic enzymes and cellular structural proteins), without identifying which ESTs correspond to proteins falling into either category. As a result, these methods are not optimally tailored to the needs of investigators

30 searching for secreted proteins because they must separate the secreted "wheat" from the non-secreted "chaff", wasting effort and resources in the process.

Co-assigned U.S. Patent No. 5,536,637, which is incorporated herein by reference, provides methods for focusing genomic sequencing efforts on sequences encoding the secreted proteins which are of most interest for identification of protein therapeutics. The '637 patent
35 discloses a "signal sequence trap" which selectively identifies ESTs for secreted

proteins, namely "secreted expressed sequence tags" or "sESTs". It is to these sESTs that the present invention is directed.

SUMMARY OF THE INVENTION

5 The present invention provides for sESTs isolated from a variety of human RNA/cDNA sources.

In preferred embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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SEQ ID NO:668, SEQ ID NO:669, SEQ ID NO:670, SEQ ID NO:671, SEQ ID
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or a complement of said sequence.

20 In other embodiments, the present invention provides an isolated polynucleotide
 consisting of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

In further embodiments, the present invention provides an isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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 NO:1513, SEQ ID NO:1514, SEQ ID NO:1515, SEQ ID NO:1516, SEQ ID
 10 NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;

or a complement of said sequence.

In yet other embodiments, the present invention provides an isolated polynucleotide
 comprising a nucleotide sequence which hybridizes to a sequence selected from the group
 consisting of:

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 15 NO:1481, SEQ ID NO:1482, SEQ ID NO:1483, SEQ ID NO:1484, SEQ ID
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 20 NO:1501, SEQ ID NO:1502, SEQ ID NO:1503, SEQ ID NO:1504, SEQ ID
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 NO:1513, SEQ ID NO:1514, SEQ ID NO:1515, SEQ ID NO:1516, SEQ ID
 NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;
 25 or to a complement of said sequence.

The invention also provides for proteins encoded by the above-described polynucleotides.

DETAILED DESCRIPTION

30 The nucleotide sequences of the sESTs of the present invention are reported in the
 Sequence Listing below. Table 2 lists the "Clone ID Nos." assigned by applicants to each
 SEQ ID NO: in the Sequence Listing.

Table 2

Each pair of entries in this table consists of the SEQ ID NO (e.g., 1, 2, etc.) followed by the Clone ID No. for such sequence (e.g., B11, B18, etc.).

	1	BK8	32		62	DY307	93	DY611
5	2	BV216	DW1001		63	DY643	94	EC259
	3	BV274	33	DW831	64	DY656	95	DY711
	4	BV48	34	DW859	65	DY675	96	EC248
	5	DN351	35	DW875	66	DY988	97	EC32
	6	DN381	36	DW888	67	DY992	98	DO703
10	7	DN405	37	DW901	68	DY225	99	DO713
	8	DU651	38	DW902	69	DY236	100	DR294
	9	DU660	39	DW904	70	DY242	101	DY1
	10	DU675	40	DW905	71	DY254	102	DY10
	11	DU684	41	DW906	72	DY914	103	DY106
15	12	DD364	42	DW929	73	DY946	104	DY117
	13	DD379	43	DW981	74	DY955	105	DY148
	14	DD389	44	DX191	75	DY959	106	DY167
	15	DD401	45	DX219	76	DY961	107	DY17
	16	DD413	46	DX245	77	DY981	108	DY174
20	17	DD426	47	DX256	78	DY357	109	DY175
	18	DD428	48	DX267	79	DY358	110	DY178
	19	DN293	49	DX66	80	DY381	111	DY23
	20	DD454	50	DX81	81	DY413	112	DY27
	21	DD472	51	DY780	82	DY414	113	DY41
25	22	DD475	52	DY803	83	DY415	114	DY42
	23	DT306	53	DY809	84	DY431	115	DY8
	24	DW282	54	DY814	85	DY433	116	DY93
	25	DW300	55	DY261	86	DY436	117	EB107
	26	DW303	56	DY264	87	DY543	118	EB113
30	27	DW323	57	DY266	88	DY565	119	EB163
	28	DT258	58	DY271	89	DY585	120	EB25
	29	DW246	59	DY287	90	DY331	121	EB77
	30	DW324	60	DY297	91	DY586	122	EC172
	31	DW333	61	DY306	92	DY696	123	EC302

	124	EC317	158	EJ90	192	EJ224	226	EP378
	125	EC328	159	EM270	193	EJ240	227	EP38
	126	EC341	160	EM278	194	EJ254	228	EO109
	127	EC349	161	EN186	195	EJ258	229	EO120
5	128	ED105	162	EN215	196	EJ265	230	EQ166
	129	ED21	163	EN217	197	EJ280	231	EQ187
	130	ED23	164	EN234	198	EJ285	232	EQ188
	131	ED30	165	EN239	199	EJ307	233	EQ190
	132	ED43	166	EN256	200	EJ38	234	EQ194
10	133	ED54	167	EN260	201	DO235	235	EQ207
	134	EE177	168	EN264	202	DO238	236	EQ208
	135	EE65	169	EN266	203	DO263	237	EQ214
	136	DQ365	170	EN271	204	DO319	238	EQ215
	137	DK393	171	EN274	205	EJ324	239	EQ218
15	138	DK399	172	EN287	206	EN470	240	EQ219
	139	DO1128	173	EN310	207	EN477	241	EQ220
	140	DO1150	174	EN342	208	EN539	242	EQ221
	141	DZ34	175	EN363	209	EP451	243	EQ226
	142	DZ42	176	EN423	210	EO10	244	EQ229
20	143	EE116	177	EH106	211	EO14	245	EQ230
	144	EE93	178	EH145	212	EO48	246	EQ231
	145	DJ387	179	EH166	213	EO58	247	EQ233
	146	DJ402	180	EH167	214	EO60	248	EQ237
	147	DN551	181	EH178	215	EO62	249	EQ261
25	148	DN559	182	EH180	216	EO68	250	EQ272
	149	DN603	183	EH186	217	EO89	251	ER104
	150	DN629	184	EH188	218	EO90	252	ER106
	151	DN631	185	EH189	219	EO92	253	ER128
	152	DO11	186	EH190	220	EO97	254	ER134
30	153	DO118	187	EH203	221	EP108	255	ER174
	154	DO15	188	EH206	222	EP165	256	ER201
	155	DO157	189	EH95	223	EP219	257	ER77
	156	DO19	190	EJ148	224	EP234	258	ER80
	157	EJ53	191	EJ179	225	EP277	259	ER97

	260	ES136	294	ER399	328	FB264	362	FG208
	261	ES306	295	ER408	329	FB38	363	FG265
	262	ES35	296	ER418	330	FB71	364	FG274
	263	ES37	297	ER430	331	FB78	365	FG278
5	264	ES206	298	ER471	332	FC12	366	FG281
	265	ET13	299	ER476	333	FB349	367	FG291
	266	ET22	300	ER493	334	FC136	368	FG294
	267	ET39	301	ER496	335	FC170	369	FG340
	268	ET84	302	ER498	336	FD152	370	FG363
10	269	EF121	303	ER524	337	FE141	371	FG372
	270	EF129	304	EW13	338	FE5	372	FG380
	271	EF45	305	EX25	339	FD131	373	FG401
	272	EF48	306	EX53	340	EC425	374	FG99
	273	EF5	307	EY165	341	EC428	375	FI203
15	274	EF88	308	EY29	342	ED204	376	FE311
	275	EG194	309	EZ35	343	ED205	377	FE315
	276	EG251	310	EZ4	344	ED210	378	FE322
	277	EH12	311	EZ88	345	ED223	379	FE329
	278	EH213	312	EZ93	346	DI301	380	FE341
20	279	EH22	313	FA8	347	DI303	381	FE366
	280	EH221	314	EV234	348	DI310	382	FE375
	281	EH248	315	EW101	349	DI39	383	FE412
	282	EH29	316	EW109	350	DJ90	384	FE415
	283	EH61	317	EW150	351	DM290	385	FE442
25	284	EH68	318	EY197	352	DM304	386	FE472
	285	EH78	319	EY206	353	DN618	387	FE557
	286	EH80	320	EY215	354	DN896	388	FE568
	287	ER311	321	EZ209	355	DN904	389	FE619
	288	ER329	322	FA139	356	FG119	390	FE676
30	289	ER343	323	FA171	357	FG126	391	FE682
	290	ER366	324	FA252	358	FG140	392	FF150
	291	ER369	325	FA28	359	FG193	393	FF153
	292	ER381	326	FA316	360	FG197	394	FF168
	293	ER395	327	FA95	361	FG198	395	FF175

	396	FF181	430	FH17	464	FN203	498	FO201
	397	FF46	431	FH170	465	FN228	499	FO209
	398	FF49	432	FH24	466	FN229	500	FO211
	399	FF97	433	FH3	467	FN251	501	FO215
5	400	FG41	434	FH39	468	FN254	502	FO253
	401	FG437	435	FH56	469	FP134	503	FO254
	402	FG441	436	FH6	470	FP14	504	FO261
	403	FG448	437	FH66	471	FP163	505	FO267
	404	FG45	438	FM109	472	FP172	506	FO275
10	405	FG492	439	FM13	473	FP71	507	FO290
	406	FG504	440	FM15	474	FP87	508	FO292
	407	FG565	441	FM150	475	EI118	509	FO316
	408	FG567	442	FM170	476	EI16	510	FO324
	409	FG57	443	FM28	477	EI187	511	FO327
15	410	FG577	444	FM3	478	EI203	512	FO348
	411	FG615	445	FM32	479	EI228	513	FO36
	412	FG625	446	FM36	480	EI231	514	FO38
	413	FG630	447	FM60	481	EI236	515	FO40
	414	FG659	448	FM86	482	EI239	516	FO66
20	415	FG708	449	FM95	483	EI243	517	FO75
	416	FG91	450	FM98	484	EI250	518	FP185
	417	FG884	451	FM99	485	EI255	519	FP193
	418	FG891	452	FN172	486	EI264	520	FP233
	419	FG909	453	FN19	487	EI273	521	FP239
25	420	FG912	454	FN29	488	FO11	522	FP246
	421	FG949	455	FN53	489	FO125	523	FP262
	422	FG952	456	FK199	490	FO128	524	FP268
	423	FG965	457	FK217	491	FO133	525	FP271
	424	FH10	458	FK23	492	FO135	526	FP273
30	425	FH116	459	FK32	493	FO147	527	FQ505
	426	FH123	460	FK59	494	FO152	528	DN647
	427	FH13	461	FK78	495	FO160	529	DN650
	428	FH136	462	FN189	496	FO173	530	DN676
	429	FH149	463	FN191	497	FO182	531	DO94

	532	FR292	566	DN827	600	FY201	634	DU4
	533	FR436	567	DN833	601	FY202	635	DU75
	534	FR451	568	DN834	602	FY243	636	FY386
	535	FR473	569	DN850	603	FY265	637	FY388
5	536	FS10	570	DO913	604	FY316	638	FY398
	537	FS106	571	DO923	605	FY318	639	FY414
	538	FS107	572	DO935	606	FY321	640	GA48
	539	FS143	573	DO938	607	FY354	641	GA63
	540	FS173	574	DO944	608	FY356	642	GA64
10	541	FS28	575	DO949	609	FY421	643	DT382
	542	FS31	576	DO952	610	FY430	644	DT385
	543	FS40	577	DQ12	611	FY455	645	DT388
	544	FV35	578	DT2	612	FY484	646	DT464
	545	FV49	579	DT44	613	FY524	647	DT470
15	546	FV68	580	DT53	614	FY530	648	DT478
	547	FW13	581	DT8	615	FY628	649	DT482
	548	FW64	582	FQ661	616	DQ242	650	DU114
	549	FY127	583	FQ672	617	DQ262	651	DU118
	550	FY136	584	FQ696	618	DQ276	652	DU123
20	551	FY60	585	FR1087	619	DQ285	653	DU133
	552	FY65	586	FR927	620	DQ304	654	DU156
	553	FY72	587	FR938	621	DQ313	655	DU157
	554	DN1112	588	FR980	622	DQ51	656	FZ5
	555	DN1118	589	FV122	623	DQ54	657	FZ87
25	556	DN1122	590	FV131	624	DR628	658	DW181
	557	DN782	591	FV132	625	GU215	659	DW309
	558	DN793	592	FV84	626	FM481	660	DX1
	559	DN795	593	FV85	627	DT117	661	DX15
	560	DN806	594	FV95	628	DT133	662	DX19
30	561	DN809	595	FX115	629	DT139	663	DX22
	562	DN810	596	FX127	630	DT164	664	DX29
	563	DN814	597	FX154	631	DU160	665	DX3
	564	DN815	598	FY187	632	DU164	666	DX4
	565	DN823	599	FY199	633	DU166	667	FZ428

	668	FZ163	702	FZ209	736	GE89	770	GF151
	669	DY474	703	FZ254	737	DY516	771	GF179
	670	FZ139	704	FZ346	738	DY529	772	GF99
	671	FX76	705	GA82	739	DY530	773	GB261
5	672	FX65	706	GA85	740	DY538	774	GC499
	673	FX55	707	GA91	741	DY830	775	GD177
	674	DU536	708	DX299	742	DY857	776	GD7
	675	FZ534	709	DX304	743	EA17	777	GE300
	676	DU515	710	DX309	744	EA36	778	DX179
10	677	DU475	711	DX316	745	GG73	779	DY757
	678	DU462	712	DX328	746	DU544	780	EC392
	679	DU353	713	DX336	747	DU560	781	EE15
	680	DU341	714	DX354	748	DZ109	782	DU408
	681	DU306	715	DX357	749	EA105	783	DU410
15	682	DU278	716	DX359	750	EA106	784	DU416
	683	DU244	717	DX363	751	EA110	785	DU447
	684	DU238	718	DX364	752	EA123	786	DX111
	685	DU236	719	DY478	753	EA46	787	DX112
	686	DU231	720	DY497	754	EA58	788	DX123
20	687	FZ639	721	DY508	755	EA7	789	DX138
	688	GC456	722	EA89	756	EA82	790	DX146
	689	GG126	723	EA9	757	GE361	791	DX153
	690	GG129	724	EA90	758	FZ510	792	DX157
	691	GG152	725	GC52	759	GE387	793	EE4
25	692	GG170	726	GC57	760	GE410	794	FZ676
	693	GG182	727	GC585	761	GE463	795	FZ683
	694	GG217	728	GC74	762	GE466	796	GD309
	695	GG440	729	GE28	763	GE468	797	GD358
	696	GG619	730	GE41	764	GE471	798	GG543
30	697	DX279	731	GE51	765	GE524	799	FX516
	698	DX288	732	GE60	766	GE539	800	FX536
	699	DX290	733	GE68	767	GE548	801	FZ1032
	700	DX295	734	GE80	768	GE549	802	FZ1041
	701	DX298	735	GE82	769	GE99	803	FZ1072

	804	FZ781	838	DD12	872	GP304	906	EM40
	805	GA147	839	DD127	873	GP329	907	EM42
	806	GA284	840	DD177	874	GP338	908	EM58
	807	DY723	841	DD204	875	GP340	909	GF185
5	808	DY737	842	DD207	876	GQ13	910	GF187
	809	DY739	843	DD211	877	GQ18	911	GF196
	810	EC399	844	DD217	878	GQ22	912	GF197
	811	EM254	845	DD504	879	GQ38	913	GF207
	812	FX194	846	DD509	880	GQ40	914	GF209
10	813	FX234	847	DD518	881	GQ56	915	GF212
	814	FX281	848	DD537	882	GQ6	916	GF218
	815	FX317	849	DD541	883	DD312	917	GF221
	816	FX353	850	DD71	884	DD352	918	GF222
	817	FX395	851	DH941	885	EK145	919	GF250
15	818	GA293	852	DQ194	886	EK208	920	GF255
	819	GA321	853	DQ204	887	EK223	921	GF256
	820	GA327	854	DQ215	888	EK234	922	GI28
	821	GB160	855	DQ216	889	EK480	923	GI3
	822	GA132	856	EK423	890	EK491	924	GI30
20	823	GA135	857	EK424	891	EK499	925	GI51
	824	GA205	858	EK450	892	EK571	926	GI63
	825	GB814	859	EL15	893	EK578	927	GI7
	826	GF87	860	DD285	894	EK581	928	GI74
	827	GG687	861	EK598	895	EK591	929	GI88
25	828	GG692	862	EK622	896	DD215	930	GI9
	829	GG694	863	EK626	897	EK634	931	DY874
	830	GG702	864	EK649	898	EL358	932	DY886
	831	GG705	865	GO653	899	EL360	933	DY900
	832	GP23	866	GP107	900	EL387	934	EM358
30	833	GP56	867	GP123	901	EL391	935	EM381
	834	GP61	868	GP168	902	EM111	936	EM386
	835	GP65	869	GP232	903	EM112	937	EM388
	836	DD115	870	GP274	904	EM12	938	EM396
	837	DD119	871	GP297	905	EM125	939	EM397

	940	EM401	974	GT43	1008	HU212	1042	EY290
	941	EM406	975	GT6	1009	HU141	1043	EY304
	942	EM408	976	HR712	1010	HS555	1044	EY313
	943	EM409	977	HR704	1011	HR95	1045	FK295
5	944	EM423	978	HR693	1012	HR906	1046	FK301
	945	EM424	979	HR628	1013	HR76	1047	FK317
	946	FE196	980	HR605	1014	HR753	1048	FK328
	947	FE204	981	EK341	1015	HR731	1049	FK349
	948	FE205	982	EK390	1016	EN116	1050	FK350
10	949	FE207	983	EN108	1017	EM341	1051	FK354
	950	FE215	984	FK235	1018	FJ283	1052	FK365
	951	FE222	985	GK428	1019	FJ307	1053	FQ105
	952	FE227	986	GT56	1020	FJ70	1054	FQ239
	953	FE228	987	FQ562	1021	FM176	1055	FQ360
15	954	FE248	988	FQ605	1022	FM197	1056	FQ45
	955	FE263	989	FQ608	1023	FM205	1057	GU353
	956	FE271	990	FQ609	1024	FM208	1058	GX167
	957	GF296	991	FQ612	1025	FM229	1059	GX183
	958	GN38	992	FS49	1026	FQ419	1060	GX208
20	959	GN45	993	FS87	1027	GX48	1061	GX210
	960	GN60	994	GM101	1028	GX5	1062	FM369
	961	GN68	995	GM103	1029	GX92	1063	FM375
	962	GN82	996	GM114	1030	FM289	1064	FM389
	963	GR286	997	GM129	1031	FM290	1065	FM432
25	964	EN10	998	GM153	1032	FM296	1066	FM459
	965	EN37	999	GM158	1033	FM300	1067	FM462
	966	FK127	1000	GM196	1034	FM312	1068	FM479
	967	FK151	1001	GM243	1035	GU512	1069	GX301
	968	GS26	1002	GM259	1036	GU534	1070	GX336
30	969	GS4	1003	GM266	1037	GU608	1071	GX354
	970	EV391	1004	HV38	1038	GX159	1072	GX361
	971	FG535	1005	HV23	1039	GX97	1073	GX403
	972	FG852	1006	HV199	1040	EW304	1074	GX408
	973	GT28	1007	HV181	1041	EY281	1075	GX418

	1076	GU830	1110	GG3	1144	GN97	1178	HE91
	1077	GU925	1111	HA510	1145	HB443	1179	HF289
	1078	GU940	1112	HA422	1146	HC324	1180	HG444
	1079	GX1031	1113	HA382	1147	HC327	1181	HF137
5	1080	GX496	1114	HA360	1148	HC505	1182	HD706
	1081	GX504	1115	HA249	1149	HC724	1183	HG710
	1082	GX509	1116	HA199	1150	HA1054	1184	HG733
	1083	GX536	1117	HA192	1151	HB1041	1185	HG775
	1084	GX540	1118	GZ568	1152	HB746	1186	HI222
10	1085	GX645	1119	GY520	1153	HB752	1187	HI39
	1086	GX700	1120	GY515	1154	HB975	1188	HH215
	1087	GX730	1121	GY330	1155	HC705	1189	HH357
	1088	GX750	1122	GY307	1156	HA791	1190	HH372
	1089	GX753	1123	HA81	1157	HC1002	1191	HH378
15	1090	GX760	1124	HA73	1158	HC1071	1192	HH390
	1091	GX814	1125	HA29	1159	HC1089	1193	HH396
	1092	GX851	1126	HA24	1160	HC831	1194	HH404
	1093	GX909	1127	HA18	1161	HC986	1195	HH433
	1094	GY102	1128	GZ78	1162	GY72	1196	HI2
20	1095	GY105	1129	GZ70	1163	HG159	1197	HH544
	1096	GY138	1130	GZ7	1164	HG620	1198	HH608
	1097	GY211	1131	GZ496	1165	HD161	1199	HH612
	1098	GX1082	1132	GZ495	1166	HD353	1200	HH625
	1099	GX1108	1133	GZ485	1167	HD378	1201	HH640
25	1100	GX1140	1134	GZ436	1168	HD417	1202	HH648
	1101	GX1165	1135	GZ420	1169	HD427	1203	HH691
	1102	GX576	1136	GZ378	1170	HD434	1204	HJ120
	1103	GX595	1137	GZ37	1171	HD499	1205	HJ140
	1104	GX606	1138	GY558	1172	HD569	1206	HJ181
30	1105	GX619	1139	GG894	1173	HD627	1207	HJ184
	1106	GG874	1140	GG907	1174	HD648	1208	HJ22
	1107	GG858	1141	GN114	1175	HE111	1209	HJ253
	1108	GG836	1142	GN115	1176	HE142	1210	HJ265
	1109	GG8	1143	GN145	1177	HE178	1211	HJ362

	1212	HJ395	1246	HM372	1280	HO722	1314	HT166
	1213	HJ411	1247	HM380	1281	HO799	1315	HT176
	1214	HJ444	1248	HM422	1282	HO801	1316	HT193
	1215	HJ65	1249	HM444	1283	HO817	1317	HT43
5	1216	HJ674	1250	HM497	1284	HO82	1318	HT81
	1217	HJ705	1251	HM544	1285	HK719	1319	HW149
	1218	HJ81	1252	HM643	1286	HO1077	1320	HW152
	1219	HJ862	1253	HN72	1287	HO1080	1321	HW190
	1220	HJ949	1254	HN78	1288	HO1087	1322	HW204
10	1221	HK10	1255	HO107	1289	HO1143	1323	HW221
	1222	HK26	1256	HO237	1290	HO1176	1324	HW243
	1223	HK60	1257	HO266	1291	HO1183	1325	HW261
	1224	HJ1037	1258	HO277	1292	HO1216	1326	HW368
	1225	HJ968	1259	HO283	1293	HO1271	1327	HW74
15	1226	HJ981	1260	HO292	1294	HO1329	1328	HX10
	1227	HJ994	1261	HO294	1295	HO1434	1329	HX102
	1228	HJ995	1262	HO305	1296	HO1441	1330	HX110
	1229	HK189	1263	HO315	1297	HO1453	1331	HX113
	1230	HK234	1264	HO332	1298	HO854	1332	HX155
20	1231	HK650	1265	HO358	1299	HO868	1333	HX188
	1232	HK658	1266	HO476	1300	HP262	1334	HX29
	1233	HK669	1267	HO481	1301	HQ36	1335	HX50
	1234	HK713	1268	HO502	1302	HQ72	1336	HY13
	1235	HK899	1269	HO54	1303	GM16	1337	HY3
25	1236	HE187	1270	HO60	1304	GM286	1338	HY55
	1237	HK162	1271	HO600	1305	GM295	1339	HY57
	1238	HL25	1272	HO617	1306	GM335	1340	HZ15
	1239	HL380	1273	HO640	1307	GM365	1341	HZ8
	1240	HL73	1274	HO663	1308	HR397	1342	IA1
30	1241	HM50	1275	HO688	1309	HR560	1343	IA21
	1242	HM54	1276	HO692	1310	HR593	1344	IA32
	1243	HM91	1277	HO693	1311	HR598	1345	IA36
	1244	HM236	1278	HO703	1312	HT13	1346	IB2
	1245	HM280	1279	HO717	1313	HT137	1347	IC2

	1348	IC9	1382	IA167	1413	HW786	1447	IE362
	1349	HY229	1383	IA183	1414	HW810	1448	IH32
	1350	HY244	1384	IA188	1415	HW846	1449	II113
	1351	HY344	1385	IA200	1416	HW849	1450	IJ101
5	1352	HY370	1386	IA220	1417	IB15	1451	IJ163
	1353	HY374	1387	IA64	1418	IB19	1452	IJ167
	1354	HY404	1388	IA69	1419	IB22	1453	IF28
	1355	HY419	1389	IA86	1420	IB28	1454	IF376
	1356	HY435	1390	HW936	1421	IB36	1455	IF456
10	1357	HZ103	1391		1422	IB49	1456	IF87
	1358	HZ109	HW1017		1423	IC103	1457	IJ1201
	1359	HZ111	1392		1424	IC126	1458	IJ1220
	1360	HZ115	HW1044		1425	IC132	1459	IJ1237
	1361	HZ71	1393		1426	IC142	1460	IJ1240
15	1362	HZ76	HW1059		1427	IC155	1461	IJ1247
	1363	HZ88	1394	HW430	1428	IC54	1462	IJ1287
	1364	HW115	1395	HW432	1429	IC87	1463	IJ1292
	1365	HW128	1396	HW440	1430	IC92	1464	IJ1299
	1366	HW477	1397	HW456	1431	IE146	1465	IJ583
20	1367	HW483	1398	HW518	1432	IE147	1466	IJ592
	1368	HW491	1399	HW591	1433	IE149	1467	IJ597
	1369	HW499	1400	HW598	1434	IE169	1468	IJ629
	1370	HW507	1401	HW627	1435	IZ6	1469	IJ638
	1371	HZ116	1402	HW646	1436	JE33	1470	IJ640
25	1372	HZ162	1403	HW649	1437	JE44	1471	IJ642
	1373	HZ185	1404	HW693	1438	JE52	1472	IJ686
	1374	HZ201	1405	HW695	1439	IE10	1473	IG25
	1375	HZ224	1406	HW697	1440	IE47	1474	IG35
	1376	HZ262	1407	HW711	1441	IE73	1475	IH40
30	1377	IA106	1408	HW715	1442	JA37	1476	IH54
	1378	IA110	1409	HW730	1443	JA78	1477	IJ288
	1379	IA114	1410	HW732	1444	JB12	1478	IJ76
	1380	IA153	1411	HW741	1445	JB23	1479	IF292
	1381	IA157	1412	HW750	1446	IE352	1480	IF513

	1481	IF548	1515	IQ58
	1482	IJ1043	1516	IS488
	1483	IJ1048	1517	IS564
	1484	IJ1054	1518	IT23
5	1485	IJ1088	1519	IT44
	1486	IJ777		
	1487	IJ887		
	1488	IJ907		
	1489	IJ928		
10	1490	IJ942		
	1491	IL1		
	1492	IL100		
	1493	IL112		
	1494	IL28		
15	1495	IK11		
	1496	IK14		
	1497	IK20		
	1498	IK203		
	1499	IK209		
20	1500	IK212		
	1501	IK343		
	1502	IK73		
	1503	IO134		
	1504	IO138		
25	1505	IO151		
	1506	IO202		
	1507	IO209		
	1508	IO31		
	1509	IO356		
30	1510	IO420		
	1511	IO62		
	1512	IQ15		
	1513	IQ45		
	1514	IQ55		

The "Clone ID No." for a particular clone consists of one or two letters followed by a number. The letters designate the tissue source from which the sEST was isolated. Table 3 below lists the various sources which were run through applicants' signal sequence trap. Thus, the tissue source for a particular sEST sequence can be identified in Table 3 by the one and two letter designations used in the relevant "Clone ID No.". For example, a clone designated as "BA312" would have been isolated from a human placenta (26 yrs.) library (i.e., selection "BA") as indicated in Table 3.

As used herein, "polynucleotide" includes single- and double-stranded RNAs, DNAs and RNA:DNA hybrids.

As used herein a "secreted" protein is one which, when expressed in a suitable host cell, is transported across or through a membrane, including transport as a result of signal sequences in its amino acid sequence. "Secreted" proteins include without limitation proteins secreted wholly (e.g., soluble proteins) or partially (e.g., receptors) from the cell in which they are expressed. "Secreted" proteins also include without limitation proteins which are transported across the membrane of the endoplasmic reticulum.

Fragments of the proteins of the present invention which are capable of exhibiting biological activity are also encompassed by the present invention. Fragments of the protein may be in linear form or they may be cyclized using known methods, for example, as described in H.U. Saragovi, *et al.*, Bio/Technology 10, 773-778 (1992) and in R.S. McDowell, *et al.*, J. Amer. Chem. Soc. 114, 9245-9253 (1992), both of which are incorporated herein by reference. Such fragments may be fused to carrier molecules such as immunoglobulins for many purposes, including increasing the valency of protein binding sites. For example, fragments of the protein may be fused through "linker" sequences to the Fc portion of an immunoglobulin. For a bivalent form of the protein, such a fusion could be to the Fc portion of an IgG molecule. Other immunoglobulin isotypes may also be used to generate such fusions. For example, a protein - IgM fusion would generate a decavalent form of the protein of the invention.

The present invention also provides both full-length and mature forms of the disclosed proteins. The full-length form of the such proteins is identified in the sequence listing by translation of the nucleotide sequence of each disclosed clone. The mature form of such protein may be obtained by expression of the disclosed full-length polynucleotide (preferably those deposited with ATCC) in a suitable mammalian cell or other host cell. The sequence of the mature form of the protein may also be determinable from the amino acid sequence of the full-length form.

The present invention also provides genes corresponding to the cDNA sequences disclosed herein. The corresponding genes can be isolated in accordance with known methods using the sequence information disclosed herein. Such methods include the preparation of probes or primers from the disclosed sequence information for identification
5 and/or amplification of genes in appropriate genomic libraries or other sources of genomic materials.

Where the protein of the present invention is membrane-bound (e.g., is a receptor), the present invention also provides for soluble forms of such protein. In such forms part or all of the intracellular and transmembrane domains of the protein are deleted such that
10 the protein is fully secreted from the cell in which it is expressed. The intracellular and transmembrane domains of proteins of the invention can be identified in accordance with known techniques for determination of such domains from sequence information.

Species homologs of the disclosed polynucleotides and proteins are also provided by the present invention. Species homologs may be isolated and identified by making
15 suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source from the desired species.

The invention also encompasses allelic variants of the disclosed polynucleotides or proteins; that is, naturally-occurring alternative forms of the isolated polynucleotide which also encode proteins which are identical, homologous or related to that encoded by the
20 polynucleotides disclosed herein.

The invention also includes polynucleotides with sequences complementary to those of the polynucleotides disclosed herein.

The present invention also includes polynucleotides capable of hybridizing, preferably under reduced stringency conditions, more preferably under stringent conditions,
25 most preferably under highly stringent conditions, to polynucleotides described herein. Examples of stringency conditions are shown in Table 1 below: highly stringent conditions are those that are at least as stringent as, for example, conditions A-F; stringent conditions are at least as stringent as, for example, conditions G-L; and reduced stringency conditions are at least as stringent as, for example, conditions M-R.

Table 1

	Stringency Condition	Polynucleotide Hybrid	Hybrid Length (bp) ²	Hybridization Temperature and Buffer ¹	Wash Temperature and Buffer ¹
5	A	DNA:DNA	≥ 50	65°C; 1xSSC -or- 42°C; 1xSSC, 50% formamide	65°C; 0.3xSSC
	B	DNA:DNA	< 50	T _B *; 1xSSC	T _B *; 1xSSC
	C	DNA:RNA	≥ 50	67°C; 1xSSC -or- 45°C; 1xSSC, 50% formamide	67°C; 0.3xSSC
	D	DNA:RNA	< 50	T _D *; 1xSSC	T _D *; 1xSSC
	E	RNA:RNA	≥ 50	70°C; 1xSSC -or- 50°C; 1xSSC, 50% formamide	70°C; 0.3xSSC
10	F	RNA:RNA	< 50	T _F *; 1xSSC	T _F *; 1xSSC
	G	DNA:DNA	≥ 50	65°C; 4xSSC -or- 42°C; 4xSSC, 50% formamide	65°C; 1xSSC
	H	DNA:DNA	< 50	T _H *; 4xSSC	T _H *; 4xSSC
	I	DNA:RNA	≥ 50	67°C; 4xSSC -or- 45°C; 4xSSC, 50% formamide	67°C; 1xSSC
	J	DNA:RNA	< 50	T _J *; 4xSSC	T _J *; 4xSSC
15	K	RNA:RNA	≥ 50	70°C; 4xSSC -or- 50°C; 4xSSC, 50% formamide	67°C; 1xSSC
	L	RNA:RNA	< 50	T _L *; 2xSSC	T _L *; 2xSSC
	M	DNA:DNA	≥ 50	50°C; 4xSSC -or- 40°C; 6xSSC, 50% formamide	50°C; 2xSSC
	N	DNA:DNA	< 50	T _N *; 6xSSC	T _N *; 6xSSC
	O	DNA:RNA	≥ 50	55°C; 4xSSC -or- 42°C; 6xSSC, 50% formamide	55°C; 2xSSC
20	P	DNA:RNA	< 50	T _P *; 6xSSC	T _P *; 6xSSC
	Q	RNA:RNA	≥ 50	60°C; 4xSSC -or- 45°C; 6xSSC, 50% formamide	60°C; 2xSSC
	R	RNA:RNA	< 50	T _R *; 4xSSC	T _R *; 4xSSC

‡: The hybrid length is that anticipated for the hybridized region(s) of the hybridizing polynucleotides. When hybridizing a polynucleotide to a target polynucleotide of unknown sequence, the hybrid length is assumed to be that of the hybridizing polynucleotide. When polynucleotides of known sequence are hybridized, the hybrid length can be determined by aligning the sequences of the polynucleotides and identifying the region or regions of optimal sequence complementarity.

*: SSPE (1xSSPE is 0.15M NaCl, 10mM NaH₂PO₄, and 1.25mM EDTA, pH 7.4) can be substituted for SSC (1xSSC is 0.15M NaCl and 15mM sodium citrate) in the hybridization and wash buffers; washes are performed for 15 minutes after hybridization is complete.

*T_B - T_R: The hybridization temperature for hybrids anticipated to be less than 50 base pairs in length should be 5-10°C less than the melting temperature (T_m) of the hybrid, where T_m is determined according to the following equations. For hybrids less than 18 base pairs in length, T_m(°C) = 2(# of A + T bases) + 4(# of G + C bases). For hybrids between 18 and 49 base pairs in length, T_m(°C) = 81.5 + 16.6(log [Na⁺]) + 0.41(%G+C) - (600/N), where N is the number of bases in the hybrid, and [Na⁺] is the concentration of sodium ions in the hybridization buffer ([Na⁺] for 1xSSC = 0.165 M).

Additional examples of stringency conditions for polynucleotide hybridization are provided in Sambrook, J., E.F. Fritsch, and T. Maniatis, 1989, *Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, chapters 9 and 11, and *Current Protocols in Molecular Biology*, 1995, F.M. Ausubel et al., eds., John Wiley & Sons, Inc., sections 2.10 and 6.3-6.4, incorporated herein by reference.

Preferably, such hybridizing polynucleotides have at least 70% sequence identity (more preferably, at least 80% identity; most preferably at least 90% or 95% identity) with the polynucleotide of the present invention to which they hybridize, where sequence identity is determined by comparing the sequences of the hybridizing polynucleotides when aligned so as to maximize overlap and identity while minimizing sequence gaps. The ~~isolated~~ polynucleotide encoding the protein of the invention may be operably linked to an expression control sequence such as the pMT2 or pED expression vectors disclosed in Kaufman *et al.*, *Nucleic Acids Res.* 19, 4485-4490 (1991), in order to produce the protein recombinantly. Many suitable expression control sequences are known in the art. General methods of expressing recombinant proteins are also known and are exemplified in R. Kaufman, *Methods in Enzymology* 185, 537-566 (1990). As defined herein "operably linked" means that the isolated polynucleotide of the invention and an expression control

sequence are situated within a vector or cell in such a way that the protein is expressed by a host cell which has been transformed (transfected) with the ligated polynucleotide/expression control sequence.

A number of types of cells may act as suitable host cells for expression of the protein. Mammalian host cells include, for example, monkey COS cells, Chinese Hamster Ovary (CHO) cells, human kidney 293 cells, human epidermal A431 cells, human Colo205 cells, 3T3 cells, CV-1 cells, other transformed primate cell lines, normal diploid cells, cell strains derived from *in vitro* culture of primary tissue, primary explants, HeLa cells, mouse L cells, BHK, HL-60, U937, HaK or Jurkat cells.

Alternatively, it may be possible to produce the protein in lower eukaryotes such as yeast or in prokaryotes such as bacteria. Potentially suitable yeast strains include *Saccharomyces cerevisiae*, *Schizosaccharomyces pombe*, *Kluyveromyces* strains, *Candida*, or any yeast strain capable of expressing heterologous proteins. Potentially suitable bacterial strains include *Escherichia coli*, *Bacillus subtilis*, *Salmonella typhimurium*, or any bacterial strain capable of expressing heterologous proteins. If the protein is made in yeast or bacteria, it may be necessary to modify the protein produced therein, for example by phosphorylation or glycosylation of the appropriate sites, in order to obtain the functional protein. Such covalent attachments may be accomplished using known chemical or enzymatic methods.

The protein may also be produced by operably linking the isolated polynucleotide of the invention to suitable control sequences in one or more insect expression vectors, and employing an insect expression system. Materials and methods for baculovirus/insect cell expression systems are commercially available in kit form from, *e.g.*, Invitrogen, San Diego, California, U.S.A. (the MaxBac® kit), and such methods are well known in the art, as described in Summers and Smith, Texas Agricultural Experiment Station Bulletin No. 1555 (1987), incorporated herein by reference. As used herein, an insect cell capable of expressing a polynucleotide of the present invention is "transformed."

The protein of the invention may be prepared by culturing transformed host cells under culture conditions suitable to express the recombinant protein. The resulting expressed protein may then be purified from such culture (*i.e.*, from culture medium or cell extracts) using known purification processes, such as gel filtration and ion exchange chromatography. The purification of the protein may also include an affinity column containing agents which will bind to the protein; one or more column steps over such affinity resins as concanavalin A-agarose, heparin-toyopearl® or Cibacrom blue 3GA

Sepharose®; one or more steps involving hydrophobic interaction chromatography using such resins as phenyl ether, butyl ether, or propyl ether; or immunoaffinity chromatography.

Alternatively, the protein of the invention may also be expressed in a form which
5 will facilitate purification. For example, it may be expressed as a fusion protein, such as those of maltose binding protein (MBP), glutathione-S-transferase (GST) or thioredoxin (TRX). Kits for expression and purification of such fusion proteins are commercially available from New England BioLab (Beverly, MA), Pharmacia (Piscataway, NJ) and InVitrogen, respectively. The protein can also be tagged with an epitope and subsequently
10 purified by using a specific antibody directed to such epitope. One such epitope ("Flag") is commercially available from Kodak (New Haven, CT).

Finally, one or more reverse-phase high performance liquid chromatography (RP-HPLC) steps employing hydrophobic RP-HPLC media, e.g., silica gel having pendant methyl or other aliphatic groups, can be employed to further purify the protein. Some or
15 all of the foregoing purification steps, in various combinations, can also be employed to provide a substantially homogeneous isolated recombinant protein. The protein thus purified is substantially free of other mammalian proteins and is defined in accordance with the present invention as an "isolated protein."

The protein of the invention may also be expressed as a product of transgenic
20 animals, e.g., as a component of the milk of transgenic cows, goats, pigs, or sheep which are characterized by somatic or germ cells containing a nucleotide sequence encoding the protein.

The protein may also be produced by known conventional chemical synthesis. Methods for constructing the proteins of the present invention by synthetic means are
25 known to those skilled in the art. The synthetically-constructed protein sequences, by virtue of sharing primary, secondary or tertiary structural and/or conformational characteristics with proteins may possess biological properties in common therewith, including protein activity. Thus, they may be employed as biologically active or immunological substitutes for natural, purified proteins in screening of therapeutic compounds and in immunological
30 processes for the development of antibodies.

The proteins provided herein also include proteins characterized by amino acid sequences similar to those of purified proteins but into which modification are naturally provided or deliberately engineered. For example, modifications in the peptide or DNA sequences can be made by those skilled in the art using known techniques. Modifications

of interest in the protein sequences may include the alteration, substitution, replacement, insertion or deletion of a selected amino acid residue in the coding sequence. For example, one or more of the cysteine residues may be deleted or replaced with another amino acid to alter the conformation of the molecule. Techniques for such alteration, substitution, replacement, insertion or deletion are well known to those skilled in the art (see, e.g., U.S. Patent No. 4,518,584). Preferably, such alteration, substitution, replacement, insertion or deletion retains the desired activity of the protein.

Other fragments and derivatives of the sequences of proteins which would be expected to retain protein activity in whole or in part and may thus be useful for screening or other immunological methodologies may also be easily made by those skilled in the art given the disclosures herein. Such modifications are believed to be encompassed by the present invention.

USES AND BIOLOGICAL ACTIVITY

The polynucleotides and proteins of the present invention are expected to exhibit one or more of the uses or biological activities (including those associated with assays cited herein) identified below. Uses or activities described for proteins of the present invention
5 may be provided by administration or use of such proteins or by administration or use of polynucleotides encoding such proteins (such as, for example, in gene therapies or vectors suitable for introduction of DNA).

Research Uses and Utilities

10 The polynucleotides provided by the present invention can be used by the research community for various purposes. The primary use of polynucleotides of the invention which are sESTs is as probes for the identification and isolation of full-length cDNAs and genomic DNA molecules which correspond (i.e., is a longer polynucleotide sequence of which substantially the entire sEST is a fragment in the case of a full-length cDNA, or
15 which encodes the sEST in the case of a genomic DNA molecule) to such sESTs. Techniques for use of such sequences as probes for larger cDNAs or genomic molecules are well known in the art.

The polynucleotides can also be used to express recombinant protein for analysis, characterization or therapeutic use; as markers for tissues in which the corresponding
20 protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in disease states); as molecular weight markers on Southern gels; as chromosome markers or tags (when labeled) to identify chromosomes or to map related gene positions; to compare with endogenous DNA sequences in patients to identify potential genetic disorders; as probes to hybridize and thus discover novel, related
25 DNA sequences; as a source of information to derive PCR primers for genetic fingerprinting; as a probe to "subtract-out" known sequences in the process of discovering other novel polynucleotides; for selecting and making oligomers for attachment to a "gene chip" or other support, including for examination of expression patterns; to raise anti-protein antibodies using DNA immunization techniques; and as an antigen to raise anti-
30 DNA antibodies or elicit another immune response. Where the polynucleotide encodes a protein which binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the polynucleotide can also be used in interaction trap assays (such as, for example, that described in Gyuris et al., Cell 75:791-803 (1993)) to identify

polynucleotides encoding the other protein with which binding occurs or to identify inhibitors of the binding interaction.

The proteins provided by the present invention can similarly be used in assay to determine biological activity, including in a panel of multiple proteins for high-throughput screening; to raise antibodies or to elicit another immune response; as a reagent (including the labeled reagent) in assays designed to quantitatively determine levels of the protein (or its receptor) in biological fluids; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in a disease state); and, of course, to isolate correlative receptors or ligand.. Where the protein binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the protein can be used to identify the other protein with which binding occurs or to identify inhibitors of the binding interaction. Proteins involved in these binding interactions can also be used to screen for peptide or small molecule inhibitors or agonists of the binding interaction.

Any or all of these research utilities are capable of being developed into reagent grade or kit format for commercialization as research products.

Methods for performing the uses listed above are well known to those skilled in the art. References disclosing such methods include without limitation "Molecular Cloning: A Laboratory Manual", 2d ed., Cold Spring Harbor Laboratory Press, Sambrook, J., E.F. Fritsch and T. Maniatis eds., 1989, and "Methods in Enzymology: Guide to Molecular Cloning Techniques", Academic Press, Berger, S.L. and A.R. Kimmel eds., 1987.

Nutritional Uses

Polynucleotides and proteins of the present invention can also be used as nutritional sources or supplements. Such uses include without limitation use as a protein or amino acid supplement, use as a carbon source, use as a nitrogen source and use as a source of carbohydrate. In such cases the protein or polynucleotide of the invention can be added to the feed of a particular organism or can be administered as a separate solid or liquid preparation, such as in the form of powder, pills, solutions, suspensions or capsules. In the case of microorganisms, the protein or polynucleotide of the invention can be added to the medium in or on which the microorganism is cultured.

Cytokine and Cell Proliferation/Differentiation Activity

A protein of the present invention may exhibit cytokine, cell proliferation (either inducing or inhibiting) or cell differentiation (either inducing or inhibiting) activity or may induce production of other cytokines in certain cell populations. Many protein factors discovered to date, including all known cytokines, have exhibited activity in one or more factor dependent cell proliferation assays, and hence the assays serve as a convenient confirmation of cytokine activity. The activity of a protein of the present invention is evidenced by any one of a number of routine factor dependent cell proliferation assays for cell lines including, without limitation, 32D, DA2, DA1G, T10, B9, B9/11, BaF3, MC9/G, M+ (preB M+), 2E8, RB5, DA1, 123, T1165, HT2, CTLL2, TF-1, Mo7e and CMK.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for T-cell or thymocyte proliferation include without limitation those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, Immunologic studies in Humans); Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bertagnolli et al., *J. Immunol.* 145:1706-1712, 1990; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Bertagnolli, et al., *J. Immunol.* 149:3778-3783, 1992; Bowman et al., *J. Immunol.* 152: 1756-1761, 1994.

Assays for cytokine production and/or proliferation of spleen cells, lymph node cells or thymocytes include, without limitation, those described in: Polyclonal T cell stimulation, Kruisbeek, A.M. and Shevach, E.M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.12.1-3.12.14, John Wiley and Sons, Toronto. 1994; and Measurement of mouse and human Interferon γ , Schreiber, R.D. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.8.1-6.8.8, John Wiley and Sons, Toronto. 1994.

Assays for proliferation and differentiation of hematopoietic and lymphopoietic cells include, without limitation, those described in: Measurement of Human and Murine Interleukin 2 and Interleukin 4, Bottomly, K., Davis, L.S. and Lipsky, P.E. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.3.1-6.3.12, John Wiley and Sons, Toronto. 1991; deVries et al., *J. Exp. Med.* 173:1205-1211, 1991; Moreau et al., *Nature* 336:690-692, 1988; Greenberger et al., *Proc. Natl. Acad. Sci. U.S.A.* 80:2931-2938, 1983; Measurement of mouse and human interleukin 6 - Nordan, R. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.6.1-6.6.5, John Wiley

and Sons, Toronto. 1991; Smith et al., Proc. Natl. Acad. Sci. U.S.A. 83:1857-1861, 1986; Measurement of human Interleukin 11 - Bennett, F., Giannotti, J., Clark, S.C. and Turner, K. J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.15.1 John Wiley and Sons, Toronto. 1991; Measurement of mouse and human Interleukin 9 -

5 Ciarletta, A., Giannotti, J., Clark, S.C. and Turner, K.J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.13.1, John Wiley and Sons, Toronto. 1991.

Assays for T-cell clone responses to antigens (which will identify, among others, proteins that affect APC-T cell interactions as well as direct T-cell effects by measuring proliferation and cytokine production) include, without limitation, those described in:

10 Current Protocols in Immunology, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function; Chapter 6, Cytokines and their cellular receptors; Chapter 7, Immunologic studies in Humans); Weinberger et al., Proc. Natl. Acad. Sci. USA 77:6091-6095, 1980; Weinberger et al., Eur. J. Immun.

15 11:405-411, 1981; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988.

Immune Stimulating or Suppressing Activity

A protein of the present invention may also exhibit immune stimulating or immune

20 suppressing activity, including without limitation the activities for which assays are described herein. A protein may be useful in the treatment of various immune deficiencies and disorders (including severe combined immunodeficiency (SCID)), e.g., in regulating (up or down) growth and proliferation of T and/or B lymphocytes, as well as effecting the cytolytic activity of NK cells and other cell populations. These immune deficiencies may

25 be genetic or be caused by viral (e.g., HIV) as well as bacterial or fungal infections, or may result from autoimmune disorders. More specifically, infectious diseases caused by viral, bacterial, fungal or other infection may be treatable using a protein of the present invention, including infections by HIV, hepatitis viruses, herpesviruses, mycobacteria, Leishmania spp., malaria spp. and various fungal infections such as candidiasis. Of course,

30 in this regard, a protein of the present invention may also be useful where a boost to the immune system generally may be desirable, i.e., in the treatment of cancer.

Autoimmune disorders which may be treated using a protein of the present invention include, for example, connective tissue disease, multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, autoimmune pulmonary inflammation, Guillain-Barre

syndrome, autoimmune thyroiditis, insulin dependent diabetes mellitus, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. Such a protein of the present invention may also be useful in the treatment of allergic reactions and conditions, such as asthma (particularly allergic asthma) or other respiratory problems. Other
5 conditions, in which immune suppression is desired (including, for example, organ transplantation), may also be treatable using a protein of the present invention.

Using the proteins of the invention it may also be possible to immune responses, in a number of ways. Down regulation may be in the form of inhibiting or blocking an immune response already in progress or may involve preventing the induction of an immune
10 response. The functions of activated T cells may be inhibited by suppressing T cell responses or by inducing specific tolerance in T cells, or both. Immunosuppression of T cell responses is generally an active, non-antigen-specific, process which requires continuous exposure of the T cells to the suppressive agent. Tolerance, which involves inducing non-responsiveness or anergy in T cells, is distinguishable from
15 immunosuppression in that it is generally antigen-specific and persists after exposure to the tolerizing agent has ceased. Operationally, tolerance can be demonstrated by the lack of a T cell response upon reexposure to specific antigen in the absence of the tolerizing agent.

Down regulating or preventing one or more antigen functions (including without limitation B lymphocyte antigen functions (such as , for example, B7)), *e.g.*, preventing
20 high level lymphokine synthesis by activated T cells, will be useful in situations of tissue, skin and organ transplantation and in graft-versus-host disease (GVHD). For example, blockage of T cell function should result in reduced tissue destruction in tissue transplantation. Typically, in tissue transplants, rejection of the transplant is initiated through its recognition as foreign by T cells, followed by an immune reaction that destroys
25 the transplant. The administration of a molecule which inhibits or blocks interaction of a B7 lymphocyte antigen with its natural ligand(s) on immune cells (such as a soluble, monomeric form of a peptide having B7-2 activity alone or in conjunction with a monomeric form of a peptide having an activity of another B lymphocyte antigen (*e.g.*, B7-1, B7-3) or blocking antibody), prior to transplantation can lead to the binding of the
30 molecule to the natural ligand(s) on the immune cells without transmitting the corresponding costimulatory signal. Blocking B lymphocyte antigen function in this manner prevents cytokine synthesis by immune cells, such as T cells, and thus acts as an immunosuppressant. Moreover, the lack of costimulation may also be sufficient to anergize the T cells, thereby inducing tolerance in a subject. Induction of long-term tolerance by B lymphocyte antigen-

blocking reagents may avoid the necessity of repeated administration of these blocking reagents. To achieve sufficient immunosuppression or tolerance in a subject, it may also be necessary to block the function of a combination of B lymphocyte antigens.

The efficacy of particular blocking reagents in preventing organ transplant rejection or GVHD can be assessed using animal models that are predictive of efficacy in humans. Examples of appropriate systems which can be used include allogeneic cardiac grafts in rats and xenogeneic pancreatic islet cell grafts in mice, both of which have been used to examine the immunosuppressive effects of CTLA4lg fusion proteins *in vivo* as described in Lenschow *et al.*, Science 257:789-792 (1992) and Turka *et al.*, Proc. Natl. Acad. Sci USA, 89:11102-11105 (1992). In addition, murine models of GVHD (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 846-847) can be used to determine the effect of blocking B lymphocyte antigen function *in vivo* on the development of that disease.

Blocking antigen function may also be therapeutically useful for treating autoimmune diseases. Many autoimmune disorders are the result of inappropriate activation of T cells that are reactive against self tissue and which promote the production of cytokines and autoantibodies involved in the pathology of the diseases. Preventing the activation of autoreactive T cells may reduce or eliminate disease symptoms. Administration of reagents which block costimulation of T cells by disrupting receptor:ligand interactions of B lymphocyte antigens can be used to inhibit T cell activation and prevent production of autoantibodies or T cell-derived cytokines which may be involved in the disease process. Additionally, blocking reagents may induce antigen-specific tolerance of autoreactive T cells which could lead to long-term relief from the disease. The efficacy of blocking reagents in preventing or alleviating autoimmune disorders can be determined using a number of well-characterized animal models of human autoimmune diseases. Examples include murine experimental autoimmune encephalitis, systemic lupus erythematosus in MRL/lpr/lpr mice or NZB hybrid mice, murine autoimmune collagen arthritis, diabetes mellitus in NOD mice and BB rats, and murine experimental myasthenia gravis (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 840-856).

Upregulation of an antigen function (preferably a B lymphocyte antigen function), as a means of up regulating immune responses, may also be useful in therapy. Upregulation of immune responses may be in the form of enhancing an existing immune response or eliciting an initial immune response. For example, enhancing an immune response through stimulating B lymphocyte antigen function may be useful in cases of viral

infection. In addition, systemic viral diseases such as influenza, the common cold, and encephalitis might be alleviated by the administration of stimulatory forms of B lymphocyte antigens systemically.

Alternatively, anti-viral immune responses may be enhanced in an infected patient
5 by removing T cells from the patient, costimulating the T cells *in vitro* with viral antigen-pulsed APCs either expressing a peptide of the present invention or together with a stimulatory form of a soluble peptide of the present invention and reintroducing the *in vitro* activated T cells into the patient. Another method of enhancing anti-viral immune responses would be to isolate infected cells from a patient, transfect them with a nucleic acid encoding
10 a protein of the present invention as described herein such that the cells express all or a portion of the protein on their surface, and reintroduce the transfected cells into the patient. The infected cells would now be capable of delivering a costimulatory signal to, and thereby activate, T cells *in vivo*.

In another application, up regulation or enhancement of antigen function (preferably
15 B lymphocyte antigen function) may be useful in the induction of tumor immunity. Tumor cells (*e.g.*, sarcoma, melanoma, lymphoma, leukemia, neuroblastoma, carcinoma) transfected with a nucleic acid encoding at least one peptide of the present invention can be administered to a subject to overcome tumor-specific tolerance in the subject. If desired, the tumor cell can be transfected to express a combination of peptides. For example, tumor
20 cells obtained from a patient can be transfected *ex vivo* with an expression vector directing the expression of a peptide having B7-2-like activity alone, or in conjunction with a peptide having B7-1-like activity and/or B7-3-like activity. The transfected tumor cells are returned to the patient to result in expression of the peptides on the surface of the transfected cell. Alternatively, gene therapy techniques can be used to target a tumor cell for transfection
25 *in vivo*.

The presence of the peptide of the present invention having the activity of a B lymphocyte antigen(s) on the surface of the tumor cell provides the necessary costimulation signal to T cells to induce a T cell mediated immune response against the transfected tumor cells. In addition, tumor cells which lack MHC class I or MHC class II molecules, or
30 which fail to reexpress sufficient amounts of MHC class I or MHC class II molecules, can be transfected with nucleic acid encoding all or a portion of (*e.g.*, a cytoplasmic-domain truncated portion) of an MHC class I α chain protein and β_2 microglobulin protein or an MHC class II α chain protein and an MHC class II β chain protein to thereby express MHC class I or MHC class II proteins on the cell surface. Expression of the appropriate class I

or class II MHC in conjunction with a peptide having the activity of a B lymphocyte antigen (e.g., B7-1, B7-2, B7-3) induces a T cell mediated immune response against the transfected tumor cell. Optionally, a gene encoding an antisense construct which blocks expression of an MHC class II associated protein, such as the invariant chain, can also be cotransfected

5 with a DNA encoding a peptide having the activity of a B lymphocyte antigen to promote presentation of tumor associated antigens and induce tumor specific immunity. Thus, the induction of a T cell mediated immune response in a human subject may be sufficient to overcome tumor-specific tolerance in the subject.

The activity of a protein of the invention may, among other means, be measured

10 by the following methods:

Suitable assays for thymocyte or splenocyte cytotoxicity include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, *Immunologic studies in Humans*); Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Takai et al., *J. Immunol.* 140:508-512, 1988; Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986;

15 20 Bowman et al., *J. Virology* 61:1992-1998; Takai et al., *J. Immunol.* 140:508-512, 1988; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Brown et al., *J. Immunol.* 153:3079-3092, 1994.

Assays for T-cell-dependent immunoglobulin responses and isotype switching

25 (which will identify, among others, proteins that modulate T-cell dependent antibody responses and that affect Th1/Th2 profiles) include, without limitation, those described in: Maliszewski, *J. Immunol.* 144:3028-3033, 1990; and Assays for B cell function: *In vitro* antibody production, Mond, J.J. and Brunswick, M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.8.1-3.8.16, John Wiley and Sons, Toronto. 1994.

30 Mixed lymphocyte reaction (MLR) assays (which will identify, among others, proteins that generate predominantly Th1 and CTL responses) include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-

3.19; Chapter 7, Immunologic studies in Humans); Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., J. Immunol. 149:3778-3783, 1992.

Dendritic cell-dependent assays (which will identify, among others, proteins expressed by dendritic cells that activate naive T-cells) include, without limitation, those described in: Guery et al., J. Immunol. 134:536-544, 1995; Inaba et al., Journal of Experimental Medicine 173:549-559, 1991; Macatonia et al., Journal of Immunology 154:5071-5079, 1995; Porgador et al., Journal of Experimental Medicine 182:255-260, 1995; Nair et al., Journal of Virology 67:4062-4069, 1993; Huang et al., Science 264:961-965, 1994; Macatonia et al., Journal of Experimental Medicine 169:1255-1264, 1989; Bhardwaj et al., Journal of Clinical Investigation 94:797-807, 1994; and Inaba et al., Journal of Experimental Medicine 172:631-640, 1990.

Assays for lymphocyte survival/apoptosis (which will identify, among others, proteins that prevent apoptosis after superantigen induction and proteins that regulate lymphocyte homeostasis) include, without limitation, those described in: Darzynkiewicz et al., Cytometry 13:795-808, 1992; Gorczyca et al., Leukemia 7:659-670, 1993; Gorczyca et al., Cancer Research 53:1945-1951, 1993; Itoh et al., Cell 66:233-243, 1991; Zacharchuk, Journal of Immunology 145:4037-4045, 1990; Zamai et al., Cytometry 14:891-897, 1993; Gorczyca et al., International Journal of Oncology 1:639-648, 1992.

Assays for proteins that influence early steps of T-cell commitment and development include, without limitation, those described in: Antica et al., Blood 84:111-117, 1994; Fine et al., Cellular Immunology 155:111-122, 1994; Galy et al., Blood 85:2770-2778, 1995; Toki et al., Proc. Nat. Acad. Sci. USA 88:7548-7551, 1991.

Hematopoiesis Regulating Activity

A protein of the present invention may be useful in regulation of hematopoiesis and, consequently, in the treatment of myeloid or lymphoid cell deficiencies. Even marginal biological activity in support of colony forming cells or of factor-dependent cell lines indicates involvement in regulating hematopoiesis, e.g. in supporting the growth and proliferation of erythroid progenitor cells alone or in combination with other cytokines, thereby indicating utility, for example, in treating various anemias or for use in conjunction with irradiation/chemotherapy to stimulate the production of erythroid precursors and/or erythroid cells; in supporting the growth and proliferation of myeloid cells such as granulocytes and monocytes/macrophages (i.e., traditional CSF activity) useful, for

example, in conjunction with chemotherapy to prevent or treat consequent myelosuppression; in supporting the growth and proliferation of megakaryocytes and consequently of platelets thereby allowing prevention or treatment of various platelet disorders such as thrombocytopenia, and generally for use in place of or complimentary to platelet transfusions; and/or in supporting the growth and proliferation of hematopoietic stem cells which are capable of maturing to any and all of the above-mentioned hematopoietic cells and therefore find therapeutic utility in various stem cell disorders (such as those usually treated with transplantation, including, without limitation, aplastic anemia and paroxysmal nocturnal hemoglobinuria), as well as in repopulating the stem cell compartment post irradiation/chemotherapy, either *in-vivo* or *ex-vivo* (i.e., in conjunction with bone marrow transplantation or with peripheral progenitor cell transplantation (homologous or heterologous)) as normal cells or genetically manipulated for gene therapy.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for proliferation and differentiation of various hematopoietic lines are cited above.

Assays for embryonic stem cell differentiation (which will identify, among others, proteins that influence embryonic differentiation hematopoiesis) include, without limitation, those described in: Johansson et al. *Cellular Biology* 15:141-151, 1995; Keller et al., *Molecular and Cellular Biology* 13:473-486, 1993; McClanahan et al., *Blood* 81:2903-2915, 1993.

Assays for stem cell survival and differentiation (which will identify, among others, proteins that regulate lympho-hematopoiesis) include, without limitation, those described in: Methylcellulose colony forming assays, Freshney, M.G. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 265-268, Wiley-Liss, Inc., New York, NY. 1994; Hirayama et al., *Proc. Natl. Acad. Sci. USA* 89:5907-5911, 1992; Primitive hematopoietic colony forming cells with high proliferative potential, McNiece, I.K. and Briddell, R.A. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 23-39, Wiley-Liss, Inc., New York, NY. 1994; Neben et al., *Experimental Hematology* 22:353-359, 1994; Cobblestone area forming cell assay, Ploemacher, R.E. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 1-21, Wiley-Liss, Inc., New York, NY. 1994; Long term bone marrow cultures in the presence of stromal cells, Spooncer, E., Dexter, M. and Allen, T. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 163-179, Wiley-Liss, Inc., New York, NY. 1994; Long term culture initiating cell assay, Sutherland,

H.J. In *Culture of Hematopoietic Cells*. R.I. Freshney, *et al.* eds. Vol pp. 139-162, Wiley-Liss, Inc., New York, NY. 1994.

Tissue Growth Activity

5 A protein of the present invention also may have utility in compositions used for bone, cartilage, tendon, ligament and/or nerve tissue growth or regeneration, as well as for wound healing and tissue repair and replacement, and in the treatment of burns, incisions and ulcers.

10 A protein of the present invention, which induces cartilage and/or bone growth in circumstances where bone is not normally formed, has application in the healing of bone fractures and cartilage damage or defects in humans and other animals. Such a preparation employing a protein of the invention may have prophylactic use in closed as well as open fracture reduction and also in the improved fixation of artificial joints. *De novo* bone formation induced by an osteogenic agent contributes to the repair of congenital, trauma
15 induced, or oncologic resection induced craniofacial defects, and also is useful in cosmetic plastic surgery.

 A protein of this invention may also be used in the treatment of periodontal disease, and in other tooth repair processes. Such agents may provide an environment to attract bone-forming cells, stimulate growth of bone-forming cells or induce differentiation of
20 progenitors of bone-forming cells. A protein of the invention may also be useful in the treatment of osteoporosis or osteoarthritis, such as through stimulation of bone and/or cartilage repair or by blocking inflammation or processes of tissue destruction (collagenase activity, osteoclast activity, etc.) mediated by inflammatory processes.

 Another category of tissue regeneration activity that may be attributable to the
25 protein of the present invention is tendon/ligament formation. A protein of the present invention, which induces tendon/ligament-like tissue or other tissue formation in circumstances where such tissue is not normally formed, has application in the healing of tendon or ligament tears, deformities and other tendon or ligament defects in humans and other animals. Such a preparation employing a tendon/ligament-like tissue inducing protein
30 may have prophylactic use in preventing damage to tendon or ligament tissue, as well as use in the improved fixation of tendon or ligament to bone or other tissues, and in repairing defects to tendon or ligament tissue. *De novo* tendon/ligament-like tissue formation induced by a composition of the present invention contributes to the repair of congenital, trauma induced, or other tendon or ligament defects of other origin, and is also useful in cosmetic

plastic surgery for attachment or repair of tendons or ligaments. The compositions of the present invention may provide an environment to attract tendon- or ligament-forming cells, stimulate growth of tendon- or ligament-forming cells, induce differentiation of progenitors of tendon- or ligament-forming cells, or induce growth of tendon/ligament cells or progenitors *ex vivo* for return *in vivo* to effect tissue repair. The compositions of the invention may also be useful in the treatment of tendinitis, carpal tunnel syndrome and other tendon or ligament defects. The compositions may also include an appropriate matrix and/or sequestering agent as a carrier as is well known in the art.

The protein of the present invention may also be useful for proliferation of neural cells and for regeneration of nerve and brain tissue, *i.e.* for the treatment of central and peripheral nervous system diseases and neuropathies, as well as mechanical and traumatic disorders, which involve degeneration, death or trauma to neural cells or nerve tissue. More specifically, a protein may be used in the treatment of diseases of the peripheral nervous system, such as peripheral nerve injuries, peripheral neuropathy and localized neuropathies, and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager syndrome. Further conditions which may be treated in accordance with the present invention include mechanical and traumatic disorders, such as spinal cord disorders, head trauma and cerebrovascular diseases such as stroke. Peripheral neuropathies resulting from chemotherapy or other medical therapies may also be treatable using a protein of the invention.

Proteins of the invention may also be useful to promote better or faster closure of non-healing wounds, including without limitation pressure ulcers, ulcers associated with vascular insufficiency, surgical and traumatic wounds, and the like.

It is expected that a protein of the present invention may also exhibit activity for generation or regeneration of other tissues, such as organs (including, for example, pancreas, liver, intestine, kidney, skin, endothelium), muscle (smooth, skeletal or cardiac) and vascular (including vascular endothelium) tissue, or for promoting the growth of cells comprising such tissues. Part of the desired effects may be by inhibition or modulation of fibrotic scarring to allow normal tissue to regenerate. A protein of the invention may also exhibit angiogenic activity.

A protein of the present invention may also be useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, and conditions resulting from systemic cytokine damage.

A protein of the present invention may also be useful for promoting or inhibiting differentiation of tissues described above from precursor tissues or cells; or for inhibiting the growth of tissues described above.

The activity of a protein of the invention may, among other means, be measured
5 by the following methods:

Assays for tissue generation activity include, without limitation, those described in: International Patent Publication No. WO95/16035 (bone, cartilage, tendon); International Patent Publication No. WO95/05846 (nerve, neuronal); International Patent Publication No. WO91/07491 (skin, endothelium).

10 Assays for wound healing activity include, without limitation, those described in: Winter, Epidermal Wound Healing, pps. 71-112 (Maibach, HI and Rovee, DT, eds.), Year Book Medical Publishers, Inc., Chicago, as modified by Eaglstein and Mertz, J. Invest. Dermatol 71:382-84 (1978).

15 Activin/Inhibin Activity

A protein of the present invention may also exhibit activin- or inhibin-related activities. Inhibins are characterized by their ability to inhibit the release of follicle stimulating hormone (FSH), while activins are characterized by their ability to stimulate the release of follicle stimulating hormone (FSH). Thus, a protein of the present invention,
20 alone or in heterodimers with a member of the inhibin α family, may be useful as a contraceptive based on the ability of inhibins to decrease fertility in female mammals and decrease spermatogenesis in male mammals. Administration of sufficient amounts of other inhibins can induce infertility in these mammals. Alternatively, the protein of the invention, as a homodimer or as a heterodimer with other protein subunits of the inhibin- β group, may
25 be useful as a fertility inducing therapeutic, based upon the ability of activin molecules in stimulating FSH release from cells of the anterior pituitary. See, for example, United States Patent 4,798,885. A protein of the invention may also be useful for advancement of the onset of fertility in sexually immature mammals, so as to increase the lifetime reproductive performance of domestic animals such as cows, sheep and pigs.

30 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for activin/inhibin activity include, without limitation, those described in: Vale et al., Endocrinology 91:562-572, 1972; Ling et al., Nature 321:779-782, 1986; Vale

et al., Nature 321:776-779, 1986; Mason et al., Nature 318:659-663, 1985; Forage et al., Proc. Natl. Acad. Sci. USA 83:3091-3095, 1986.

Chemotactic/Chemokinetic Activity

5 A protein of the present invention may have chemotactic or chemokinetic activity (e.g., act as a chemokine) for mammalian cells, including, for example, monocytes, fibroblasts, neutrophils, T-cells, mast cells, eosinophils, epithelial and/or endothelial cells. Chemotactic and chemokinetic proteins can be used to mobilize or attract a desired cell population to a desired site of action. Chemotactic or chemokinetic proteins provide
10 particular advantages in treatment of wounds and other trauma to tissues, as well as in treatment of localized infections. For example, attraction of lymphocytes, monocytes or neutrophils to tumors or sites of infection may result in improved immune responses against the tumor or infecting agent.

A protein or peptide has chemotactic activity for a particular cell population if it can
15 stimulate, directly or indirectly, the directed orientation or movement of such cell population. Preferably, the protein or peptide has the ability to directly stimulate directed movement of cells. Whether a particular protein has chemotactic activity for a population of cells can be readily determined by employing such protein or peptide in any known assay for cell chemotaxis.

20 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for chemotactic activity (which will identify proteins that induce or prevent chemotaxis) consist of assays that measure the ability of a protein to induce the migration of cells across a membrane as well as the ability of a protein to induce the adhesion of one
25 cell population to another cell population. Suitable assays for movement and adhesion include, without limitation, those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 6.12, Measurement of alpha and beta Chemokines 6.12.1-6.12.28; Taub et al. J. Clin. Invest. 95:1370-1376, 1995; Lind et al. APMIS 103:140-146, 1995; Muller et al Eur. J. Immunol. 25: 1744-1748; Gruber et al.
30 J. of Immunol. 152:5860-5867, 1994; Johnston et al. J. of Immunol. 153: 1762-1768, 1994.

Hemostatic and Thrombolytic Activity

A protein of the invention may also exhibit hemostatic or thrombolytic activity. As a result, such a protein is expected to be useful in treatment of various coagulation disorders (including hereditary disorders, such as hemophilias) or to enhance coagulation and other hemostatic events in treating wounds resulting from trauma, surgery or other causes. A
5 protein of the invention may also be useful for dissolving or inhibiting formation of thromboses and for treatment and prevention of conditions resulting therefrom (such as, for example, infarction of cardiac and central nervous system vessels (e.g., stroke).

The activity of a protein of the invention may, among other means, be measured by the following methods:

- 10 Assay for hemostatic and thrombolytic activity include, without limitation, those described in: Linet et al., J. Clin. Pharmacol. 26:131-140, 1986; Burdick et al., Thrombosis Res. 45:413-419, 1987; Humphrey et al., Fibrinolysis 5:71-79 (1991); Schaub, Prostaglandins 35:467-474, 1988.

15 Receptor/Ligand Activity

- A protein of the present invention may also demonstrate activity as receptors, receptor ligands or inhibitors or agonists of receptor/ligand interactions. Examples of such receptors and ligands include, without limitation, cytokine receptors and their ligands, receptor kinases and their ligands, receptor phosphatases and their ligands, receptors
20 involved in cell-cell interactions and their ligands (including without limitation, cellular adhesion molecules (such as selectins, integrins and their ligands) and receptor/ligand pairs involved in antigen presentation, antigen recognition and development of cellular and humoral immune responses). Receptors and ligands are also useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction.
- 25 A protein of the present invention (including, without limitation, fragments of receptors and ligands) may themselves be useful as inhibitors of receptor/ligand interactions.

The activity of a protein of the invention may, among other means, be measured by the following methods:

- Suitable assays for receptor-ligand activity include without limitation those
30 described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 7.28, Measurement of Cellular Adhesion under static conditions 7.28.1-7.28.22), Takai et al., Proc. Natl. Acad. Sci. USA 84:6864-6868, 1987; Bierer et al., J. Exp. Med. 168:1145-1156, 1988; Rosenstein et al., J. Exp. Med.

169:149-160 1989; Stoltenborg et al., J. Immunol. Methods 175:59-68, 1994; Stitt et al., Cell 80:661-670, 1995.

Anti-Inflammatory Activity

5 Proteins of the present invention may also exhibit anti-inflammatory activity. The anti-inflammatory activity may be achieved by providing a stimulus to cells involved in the inflammatory response, by inhibiting or promoting cell-cell interactions (such as, for example, cell adhesion), by inhibiting or promoting chemotaxis of cells involved in the inflammatory process, inhibiting or promoting cell extravasation, or by stimulating or
10 suppressing production of other factors which more directly inhibit or promote an inflammatory response. Proteins exhibiting such activities can be used to treat inflammatory conditions including chronic or acute conditions), including without limitation inflammation associated with infection (such as septic shock, sepsis or systemic inflammatory response syndrome (SIRS)), ischemia-reperfusion injury, endotoxin lethality,
15 arthritis, complement-mediated hyperacute rejection, nephritis, cytokine or chemokine-induced lung injury, inflammatory bowel disease, Crohn's disease or resulting from over production of cytokines such as TNF or IL-1. Proteins of the invention may also be useful to treat anaphylaxis and hypersensitivity to an antigenic substance or material.

20 Tumor Inhibition Activity

In addition to the activities described above for immunological treatment or prevention of tumors, a protein of the invention may exhibit other anti-tumor activities. A protein may inhibit tumor growth directly or indirectly (such as, for example, via ADCC). A protein may exhibit its tumor inhibitory activity by acting on tumor tissue or tumor
25 precursor tissue, by inhibiting formation of tissues necessary to support tumor growth (such as, for example, by inhibiting angiogenesis), by causing production of other factors, agents or cell types which inhibit tumor growth, or by suppressing, eliminating or inhibiting factors, agents or cell types which promote tumor growth.

30

Other Activities

A protein of the invention may also exhibit one or more of the following additional activities or effects: inhibiting the growth, infection or function of, or killing, infectious agents, including, without limitation, bacteria, viruses, fungi and other parasites; effecting

(suppressing or enhancing) bodily characteristics, including, without limitation, height, weight, hair color, eye color, skin, fat to lean ratio or other tissue pigmentation, or organ or body part size or shape (such as, for example, breast augmentation or diminution, change in bone form or shape); effecting biorhythms or circadian cycles or rhythms; effecting the fertility of male or female subjects; effecting the metabolism, catabolism, anabolism, processing, utilization, storage or elimination of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors or other nutritional factors or component(s); effecting behavioral characteristics, including, without limitation, appetite, libido, stress, cognition (including cognitive disorders), depression (including depressive disorders) and violent behaviors; providing analgesic effects or other pain reducing effects; promoting differentiation and growth of embryonic stem cells in lineages other than hematopoietic lineages; hormonal or endocrine activity; in the case of enzymes, correcting deficiencies of the enzyme and treating deficiency-related diseases; treatment of hyperproliferative disorders (such as, for example, psoriasis); immunoglobulin-like activity (such as, for example, the ability to bind antigens or complement); and the ability to act as an antigen in a vaccine composition to raise an immune response against such protein or another material or entity which is cross-reactive with such protein.

20

ADMINISTRATION AND DOSING

A protein of the present invention (from whatever source derived, including without limitation from recombinant and non-recombinant sources) may be used in a pharmaceutical composition when combined with a pharmaceutically acceptable carrier. Such a composition may also contain (in addition to protein and a carrier) diluents, fillers, salts, buffers, stabilizers, solubilizers, and other materials well known in the art. The term "pharmaceutically acceptable" means a non-toxic material that does not interfere with the effectiveness of the biological activity of the active ingredient(s). The characteristics of the carrier will depend on the route of administration. The pharmaceutical composition of the invention may also contain cytokines, lymphokines, or other hematopoietic factors such as M-CSF, GM-CSF, TNF, IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-13, IL-14, IL-15, IFN, TNF0, TNF1, TNF2, G-CSF, Meg-CSF, thrombopoietin, stem cell factor, and erythropoietin. The pharmaceutical composition may further contain other agents which either enhance the activity of the protein or compliment its activity or use in treatment. Such additional factors and/or agents may be included in the pharmaceutical composition to produce a synergistic effect with protein of the invention, or to minimize side effects. Conversely, protein of the present invention may be included in formulations of the particular cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent to minimize side effects of the cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent.

A protein of the present invention may be active in multimers (e.g., heterodimers or homodimers) or complexes with itself or other proteins. As a result, pharmaceutical compositions of the invention may comprise a protein of the invention in such multimeric or complexed form.

The pharmaceutical composition of the invention may be in the form of a complex of the protein(s) of present invention along with protein or peptide antigens. The protein and/or peptide antigen will deliver a stimulatory signal to both B and T lymphocytes. B lymphocytes will respond to antigen through their surface immunoglobulin receptor. T lymphocytes will respond to antigen through the T cell receptor (TCR) following presentation of the antigen by MHC proteins. MHC and structurally related proteins including those encoded by class I and class II MHC genes on host cells will serve to present the peptide antigen(s) to T lymphocytes. The antigen components could also be supplied as purified MHC-peptide complexes alone or with co-stimulatory molecules that

can directly signal T cells. Alternatively antibodies able to bind surface immunoglobulin and other molecules on B cells as well as antibodies able to bind the TCR and other molecules on T cells can be combined with the pharmaceutical composition of the invention.

5 The pharmaceutical composition of the invention may be in the form of a liposome in which protein of the present invention is combined, in addition to other pharmaceutically acceptable carriers, with amphipathic agents such as lipids which exist in aggregated form as micelles, insoluble monolayers, liquid crystals, or lamellar layers in aqueous solution. Suitable lipids for liposomal formulation include, without limitation, monoglycerides, 10 diglycerides, sulfatides, lysolecithin, phospholipids, saponin, bile acids, and the like. Preparation of such liposomal formulations is within the level of skill in the art, as disclosed, for example, in U.S. Patent No. 4,235,871; U.S. Patent No. 4,501,728; U.S. Patent No. 4,837,028; and U.S. Patent No. 4,737,323, all of which are incorporated herein by reference.

15 As used herein, the term "therapeutically effective amount" means the total amount of each active component of the pharmaceutical composition or method that is sufficient to show a meaningful patient benefit, i.e., treatment, healing, prevention or amelioration of the relevant medical condition, or an increase in rate of treatment, healing, prevention or amelioration of such conditions. When applied to an individual active ingredient, 20 administered alone, the term refers to that ingredient alone. When applied to a combination, the term refers to combined amounts of the active ingredients that result in the therapeutic effect, whether administered in combination, serially or simultaneously.

In practicing the method of treatment or use of the present invention, a therapeutically effective amount of protein of the present invention is administered to a 25 mammal having a condition to be treated. Protein of the present invention may be administered in accordance with the method of the invention either alone or in combination with other therapies such as treatments employing cytokines, lymphokines or other hematopoietic factors. When co-administered with one or more cytokines, lymphokines or other hematopoietic factors, protein of the present invention may be administered either 30 simultaneously with the cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors, or sequentially. If administered sequentially, the attending physician will decide on the appropriate sequence of administering protein of the present invention in combination with cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors.

Administration of protein of the present invention used in the pharmaceutical composition or to practice the method of the present invention can be carried out in a variety of conventional ways, such as oral ingestion, inhalation, topical application or cutaneous, subcutaneous, intraperitoneal, parenteral or intravenous injection. Intravenous
5 administration to the patient is preferred.

When a therapeutically effective amount of protein of the present invention is administered orally, protein of the present invention will be in the form of a tablet, capsule, powder, solution or elixir. When administered in tablet form, the pharmaceutical composition of the invention may additionally contain a solid carrier such as a gelatin or an
10 adjuvant. The tablet, capsule, and powder contain from about 5 to 95% protein of the present invention, and preferably from about 25 to 90% protein of the present invention. When administered in liquid form, a liquid carrier such as water, petroleum, oils of animal or plant origin such as peanut oil, mineral oil, soybean oil, or sesame oil, or synthetic oils may be added. The liquid form of the pharmaceutical composition may further contain
15 physiological saline solution, dextrose or other saccharide solution, or glycols such as ethylene glycol, propylene glycol or polyethylene glycol. When administered in liquid form, the pharmaceutical composition contains from about 0.5 to 90% by weight of protein of the present invention, and preferably from about 1 to 50% protein of the present invention.

When a therapeutically effective amount of protein of the present invention is administered by intravenous, cutaneous or subcutaneous injection, protein of the present invention will be in the form of a pyrogen-free, parenterally acceptable aqueous solution. The preparation of such parenterally acceptable protein solutions, having due regard to pH, isotonicity, stability, and the like, is within the skill in the art. A preferred pharmaceutical
20 composition for intravenous, cutaneous, or subcutaneous injection should contain, in addition to protein of the present invention, an isotonic vehicle such as Sodium Chloride Injection, Ringer's Injection, Dextrose Injection, Dextrose and Sodium Chloride Injection, Lactated Ringer's Injection, or other vehicle as known in the art. The pharmaceutical composition of the present invention may also contain stabilizers, preservatives, buffers,
25 antioxidants, or other additives known to those of skill in the art.
30

The amount of protein of the present invention in the pharmaceutical composition of the present invention will depend upon the nature and severity of the condition being treated, and on the nature of prior treatments which the patient has undergone. Ultimately, the attending physician will decide the amount of protein of the present invention with

which to treat each individual patient. Initially, the attending physician will administer low doses of protein of the present invention and observe the patient's response. Larger doses of protein of the present invention may be administered until the optimal therapeutic effect is obtained for the patient, and at that point the dosage is not increased further. It is contemplated that the various pharmaceutical compositions used to practice the method of the present invention should contain about 0.01 μ g to about 100 mg (preferably about 0.1 mg to about 10 mg, more preferably about 0.1 μ g to about 1 mg) of protein of the present invention per kg body weight.

The duration of intravenous therapy using the pharmaceutical composition of the present invention will vary, depending on the severity of the disease being treated and the condition and potential idiosyncratic response of each individual patient. It is contemplated that the duration of each application of the protein of the present invention will be in the range of 12 to 24 hours of continuous intravenous administration. Ultimately the attending physician will decide on the appropriate duration of intravenous therapy using the pharmaceutical composition of the present invention.

Protein of the invention may also be used to immunize animals to obtain polyclonal and monoclonal antibodies which specifically react with the protein. Such antibodies may be obtained using either the entire protein or fragments thereof as an immunogen. The peptide immunogens additionally may contain a cysteine residue at the carboxyl terminus, and are conjugated to a hapten such as keyhole limpet hemocyanin (KLH). Methods for synthesizing such peptides are known in the art, for example, as in R.P. Merrifield, J. Amer.Chem.Soc. 85, 2149-2154 (1963); J.L. Krstenansky, *et al.*, FEBS Lett. 211, 10 (1987). Monoclonal antibodies binding to the protein of the invention may be useful diagnostic agents for the immunodetection of the protein. Neutralizing monoclonal antibodies binding to the protein may also be useful therapeutics for both conditions associated with the protein and also in the treatment of some forms of cancer where abnormal expression of the protein is involved. In the case of cancerous cells or leukemic cells, neutralizing monoclonal antibodies against the protein may be useful in detecting and preventing the metastatic spread of the cancerous cells, which may be mediated by the protein.

For compositions of the present invention which are useful for bone, cartilage, tendon or ligament regeneration, the therapeutic method includes administering the composition topically, systematically, or locally as an implant or device. When administered, the therapeutic composition for use in this invention is, of course, in a

pyrogen-free, physiologically acceptable form. Further, the composition may desirably be encapsulated or injected in a viscous form for delivery to the site of bone, cartilage or tissue damage. Topical administration may be suitable for wound healing and tissue repair. Therapeutically useful agents other than a protein of the invention which may also
5 optionally be included in the composition as described above, may alternatively or additionally, be administered simultaneously or sequentially with the composition in the methods of the invention. Preferably for bone and/or cartilage formation, the composition would include a matrix capable of delivering the protein-containing composition to the site of bone and/or cartilage damage, providing a structure for the developing bone and
10 cartilage and optimally capable of being resorbed into the body. Such matrices may be formed of materials presently in use for other implanted medical applications.

The choice of matrix material is based on biocompatibility, biodegradability, mechanical properties, cosmetic appearance and interface properties. The particular application of the compositions will define the appropriate formulation. Potential matrices
15 for the compositions may be biodegradable and chemically defined calcium sulfate, tricalciumphosphate, hydroxyapatite, polylactic acid, polyglycolic acid and polyanhydrides. Other potential materials are biodegradable and biologically well-defined, such as bone or dermal collagen. Further matrices are comprised of pure proteins or extracellular matrix components. Other potential matrices are nonbiodegradable and chemically defined, such
20 as sintered hydroxapatite, bioglass, aluminates, or other ceramics. Matrices may be comprised of combinations of any of the above mentioned types of material, such as polylactic acid and hydroxyapatite or collagen and tricalciumphosphate. The bioceramics may be altered in composition, such as in calcium-aluminate-phosphate and processing to alter pore size, particle size, particle shape, and biodegradability.

25 Presently preferred is a 50:50 (mole weight) copolymer of lactic acid and glycolic acid in the form of porous particles having diameters ranging from 150 to 800 microns. In some applications, it will be useful to utilize a sequestering agent, such as carboxymethyl cellulose or autologous blood clot, to prevent the protein compositions from disassociating from the matrix.

30 A preferred family of sequestering agents is cellulosic materials such as alkylcelluloses (including hydroxyalkylcelluloses), including methylcellulose, ethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropyl-methylcellulose, and carboxymethylcellulose, the most preferred being cationic salts of carboxymethylcellulose (CMC). Other preferred sequestering agents include hyaluronic acid, sodium alginate,

poly(ethylene glycol), polyoxyethylene oxide, carboxyvinyl polymer and poly(vinyl alcohol). The amount of sequestering agent useful herein is 0.5-20 wt%, preferably 1-10 wt% based on total formulation weight, which represents the amount necessary to prevent desorption of the protein from the polymer matrix and to provide appropriate handling of the composition, yet not so much that the progenitor cells are prevented from infiltrating the matrix, thereby providing the protein the opportunity to assist the osteogenic activity of the progenitor cells.

In further compositions, proteins of the invention may be combined with other agents beneficial to the treatment of the bone and/or cartilage defect, wound, or tissue in question. These agents include various growth factors such as epidermal growth factor (EGF), platelet derived growth factor (PDGF), transforming growth factors (TGF- α and TGF- β), and insulin-like growth factor (IGF).

The therapeutic compositions are also presently valuable for veterinary applications. Particularly domestic animals and thoroughbred horses, in addition to humans, are desired patients for such treatment with proteins of the present invention.

The dosage regimen of a protein-containing pharmaceutical composition to be used in tissue regeneration will be determined by the attending physician considering various factors which modify the action of the proteins, e.g., amount of tissue weight desired to be formed, the site of damage, the condition of the damaged tissue, the size of a wound, type of damaged tissue (e.g., bone), the patient's age, sex, and diet, the severity of any infection, time of administration and other clinical factors. The dosage may vary with the type of matrix used in the reconstitution and with inclusion of other proteins in the pharmaceutical composition. For example, the addition of other known growth factors, such as IGF I (insulin like growth factor I), to the final composition, may also effect the dosage. Progress can be monitored by periodic assessment of tissue/bone growth and/or repair, for example, X-rays, histomorphometric determinations and tetracycline labeling.

Polynucleotides of the present invention can also be used for gene therapy. Such polynucleotides can be introduced either *in vivo* or *ex vivo* into cells for expression in a mammalian subject. Polynucleotides of the invention may also be administered by other known methods for introduction of nucleic acid into a cell or organism (including, without limitation, in the form of viral vectors or naked DNA).

Cells may also be cultured *ex vivo* in the presence of proteins of the present invention in order to proliferate or to produce a desired effect on or activity in such cells. Treated cells can then be introduced *in vivo* for therapeutic purposes.

Patent and literature references cited herein are incorporated by reference as if fully set forth.

Table 3

Sel.	Species	Tissue	Cell Type
AA	Human	Kidney	19-23wks., M/F pool of 5
AB	Human	Fetal Lung	Fetal Lung
AC	Human	Placenta	26yrs., 1 specimen
AD	Murine	Embryo	Fetal ES cells
AE	Murine	Spleen	Adult spleen
AF	Murine	Fetal Brain	Fetal Brain
AG	Murine	Fetal Brain	Fetal Brain
AH	Murine	Fetal Thymus	Fetal Thymus
AI	Human	Blood	Adult PBMC/TH1or2
AJ	Human	Testes	10-61yrs., pool of 11
AK	Human	Kidney	19-23wks., M/F pool of 5
AL	Human	Neural	Adult Glioblastoma line TG-1
AM	Human	Kidney	19-23wks., M/F pool of 5
AN	Murine	Bone Marrow	Adult Stromal cell line FCM-4
AO	Murine	Thymus	Adult Subtr. Adult Thymus
AP	Human	Placenta	26yrs., 1 specimen
AQ	Human	Ovary	PA-1 Teratocarcinoma
AR	Human	Retina	16-75yrs., pool of 76
AS	Human	Brain	19-23wks., M/F pool of 5
AT	Human	Blood	Adult lymphocytes+dend. cells
AU	Human	Testes	10-61yrs., pool of 11
AV	Murine	Spleen	Adult spleen
AW	Human	Ovary	PA-1 Teratocarcinoma
AX	Human	Testes	10-61yrs., pool of 11
AY	Human	Retina	16-75yrs., pool of 76
AZ	Human	Colon	Caco-2 Adenocarcinoma
B	Human	Blood	PeripheralBloodMononuclearCell
BA	Human	Placenta	26yrs., 1 specimen
BB	Human	Blood	Adult PBMC/TH1or2
BC	Murine	Embryo	Fetal ES cells
BD	Human	Kidney	19-23wks., M/F pool of 5
BE	Human	Blood	Adult PBMC/TH1or2
BF	Human	Brain	19-23wks., M/F pool of 5
BG	Human	Brain	N/A
BH	Human	Ovary	PA-1 Teratocarcinoma
BI	Human	Kidney	19-23wks., M/F pool of 5
BJ	Human	Ovary	PA-1 Teratocarcinoma
BK	Human	Retina	16-75yrs., pool of 76
BL	Human	Testes	10-61yrs., pool of 11
BM	Human	Muscle	N/A
BN	Human	Placenta	26yrs., 1 specimen
BO	Human	Retina	16-75yrs., pool of 76
BP	Human	Kidney	19-23wks., M/F pool of 5
BQ	Human	Colon	Caco-2 Adenocarcinoma Caco2

BR	Human	Kidney	19-23wks., M/F pool of 5
BS	Human	Pituitary	Adult Pituitary
BT	Human	Blood	Adult PBMC
BU	Human	Placenta	26yrs., 1 specimen
BV	Human	Brain	N/A
BW	Human	Blood	Adult PBMC
BX	Human	Ovary	PA-1 Teratocarcinoma
BY	Human	Blood	Adult PBMC/TH1 or 2
BZ	Human	Kidney	19-23wks., M/F pool of 5
C	Human	Blood	Peripheral Blood Mononuclear Cell
CA	Murine	Embryo	Fetal ES cell embryoid bodies
CB	Human	Brain	19-23wks., M/F pool of 5
CC	Human	Brain	N/A
CD	Human	Brain	19-23wks., M/F pool of 5
CE	Human	Blood	Adult lymphocytes+dend. cells
CF	Human	Placenta	26yrs., 1 specimen
CG	Human	Testes	10-61yrs., pool of 11
CH	Human	Kidney	19-23wks., M/F pool of 5
CI	Human	Brain	N/A
CJ	Human	Brain	19-23wks., M/F pool of 5
CK	Human	Testes	10-61yrs., pool of 11
CL	Human	Retina	16-75yrs., pool of 76
CM	Human	Adult Lung	Adult Lung
CN	Human	Brain	19-23wks., M/F pool of 5
CO	Human	Brain	N/A
CP	Human	Salivary Gland	N/A
CQ	Human	Heart	13-73yrs., pool of 3
CR	Human	Testes	10-61yrs., pool of 11
CS	Human	Brain	19-23wks., M/F pool of 5
CT	Human	Brain	N/A
CU	Human	Pineal Gland	N/A
CV	Human	Mammary	Adult Human Mammary
CW	Human	Brain	19-23wks., M/F pool of 5
CY	Human	Pineal Gland	N/A
CZ	Human	Testes	10-61yrs., pool of 11
D	Human	Blood	Peripheral Blood Mononuclear Cell
DA	Human	Placenta	26yrs., 1 specimen
DB	Human	Prostate	Adult Prostate
DC	Human	Pineal Gland	Adult Pineal Gland
DD	Human	Testes	10-61yrs., pool of 11
DE	Human	Testes	Adult NCCIT TeratoCA
DF	Human	Brain	N/A
DG	Human	Placenta	26yrs., 1 specimen
DH	Human	Brain	19-23wks., M/F pool of 5
DI	Human	Testes	10-61yrs., pool of 11
DJ	Human	Placenta	26yrs., 1 specimen
DK	Human	Fetal Kidney2	Fetal Kidney

DL	Human	Brain	N/A
DM	Human	Brain	N/A
DN	Human	Brain	19-23wks., M/F pool of 5
DO	Human	Testes	10-61yrs., pool of 11
DP	Murine	Embryo	Fetal ES cell embryoid bodies
DQ	Human	Placenta	26yrs., 1 specimen
DR	Human	SalivaryGland	N/A
DT	Human	Brain	N/A
DU	Human	Brain	19-23wks., M/F pool of 5
DV	Human	Pineal Gland	Adult Pineal Gland
DW	Human	Brain	N/A
DX	Human	Testes	10-61yrs., pool of 11
DY	Human	Brain	N/A
DZ	Human	Testes	Adult NCCIT TeratoCA
E	Human	Blood	PeripheralBloodMononuclearCell
EA	Human	Brain	19-23wks., M/F pool of 5
EB	Human	Melanoma	Adult Melanoma
EC	Human	Brain	N/A
ED	Human	Placenta	26yrs., 1 specimen
EE	Human	Testes	10-61yrs., pool of 11
EF	Human	Liver	Adult Liver
EG	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
EH	Human	Blood	PeripheralBloodMononuclearCell
EI	Human	Brain	19-23wks., M/F pool of 5
EJ	Human	Placenta	26yrs., 1 specimen
EK	Human	Brain	19-23wks., M/F pool of 5
EL	Human	Testes	10-61yrs., pool of 11
EM	Human	Fetal Kidney2	Fetal Kidney
EN	Human	Brain	19-23wks., M/F pool of 5
EO	Human	Adrenal Gland	Adult Adrenal Gland
EP	Human	Placenta	26yrs., 1 specimen
EQ	Human	Testes	10-61yrs., pool of 11
ER	Human	Brain	19-23wks., M/F pool of 5
ES	Human	Placenta	26yrs., 1 specimen
ET	Human	Testes	10-61yrs., pool of 11
EU	Human	Kidney	Adult Kidney
EV	Human	Stomach	Adult Stomach
EW	Human	Placenta	26yrs., 1 specimen
EX	Human	Testes	10-61yrs., pool of 11
EY	Human	Brain	19-23wks., M/F pool of 5
EZ	Human	Fetal Kidney2	Fetal Kidney
FA	Human	Brain	19-23wks., M/F pool of 5
FB	Human	Placenta	26yrs., 1 specimen
FC	Human	Testes	10-61yrs., pool of 11
FD	Human	SalivaryGland	N/A
FE	Human	Brain	N/A
FF	Human	Testes	Adult NCCIT TeratoCA

FG	Human	Brain	N/A
FH	Human	Brain	19-23wks., M/F pool of 5
FI	Human	Small Intest	Adult Small Intestine
FJ	Human	Lung CA	Adult Lung CA
FK	Human	Kidney	Adult Kidney
FM	Human	Brain	N/A
FN	Human	Brain	19-23wks., M/F pool of 5
FO	Human	Brain	N/A
FP	Human	Placenta	26yrs., 1 specimen
FQ	Human	Testes	10-61yrs., pool of 11
FR	Human	Placenta	26yrs., 1 specimen
FS	Human	Testes	10-61yrs., pool of 11
FT	Chicken	Fetal Lung	Fetal Lung
FU	Chicken	Limb Bud	Fetal St. 23 Limb Bud
FV	Human	Testes	Adult NCCIT TeratoCA
FW	Human	Testes	Adult NCCIT TeratoCA
FX	Human	Brain	19-23wks., M/F pool of 5
FY	Human	Placenta	26yrs., 1 specimen
FZ	Human	Placenta	26yrs., 1 specimen
G	Human	Blood	PeripheralBloodMononuclearCell
GA	Human	Testes	10-61yrs., pool of 11
GB	Human	Placenta	26yrs., 1 specimen
GC	Human	Testes	10-61yrs., pool of 11
GD	Human	Placenta	26yrs., 1 specimen
GE	Human	Brain	N/A
GF	Human	Brain	19-23wks., M/F pool of 5
GG	Human	Fetal Kidney2	Fetal Kidney
GH	Human	Placenta	26yrs., 1 specimen
GI	Human	Retinoblastoma	Adult Retinoblastoma Y79
GJ	Murine	Spleen	Adult Spleen
GK	Human	Fetal Kidney2	Fetal Kidney
GL	Murine	Lymph Node	Adult Lymph Node
GM	Human	Uterus	N/A
GN	Human	Blood	PeripheralBloodMononuclearCell
GO	Human	Adrenal Gland	Adult Adrenal Gland
GP	Human	Ovary	PA-1 Teratocarcinoma
GQ	Human	Pineal Gland	N/A
GR	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
GS	Human	Retina	16-75yrs., pool of 76
GT	Human	Brain	N/A
GU	Human	Fetal Kidney2	Fetal Kidney
GV	Rat	Retina	Newborn Retina
GW	Chicken	Limb Bud	Fetal St.26 Limb Bud
GX	Human	Brain	N/A
GY	Human	Testes	10-61yrs., pool of 11
GZ	Human	Brain	19-23wks., M/F pool of 5
H	Human	Blood	PeripheralBloodMononuclearCell

HA	Human	Testes	Adult NCCIT TeratoCA
HB	Human	Fetal Kidney2	Fetal Kidney
HC	Human	Brain	19-23wks., M/F pool of 5
HD	Human	Brain	N/A
HE	Human	Testes	10-61yrs., pool of 11
HF	Human	Brain	19-23wks., M/F pool of 5
HG	Human	Fetal Kidney2	Fetal Kidney
HH	Human	Brain	N/A
HI	Human	Testes	10-61yrs., pool of 11
HJ	Human	Brain	N/A
HK	Human	Brain	19-23wks., M/F pool of 5
HL	Human	Fetal Kidney2	Fetal Kidney
HM	Human	Testes	Adult NCCIT TeratoCA
HN	Human	Fetal Kidney2	Fetal Kidney
HO	Human	Brain	N/A
HP	Human	Brain	19-23wks., M/F pool of 5
HQ	Human	Testes	10-61yrs., pool of 11
HR	Human	Brain	N/A
HS	Human	Brain	N/A
HT	Human	Brain	19-23wks., M/F pool of 5
HU	Human	Fetal Kidney2	Fetal Kidney
HV	Human	Testes	10-61yrs., pool of 11
HW	Human	Brain	N/A
HX	Human	Brain Hippoca	Adult Brain Hippocampus
HY	Human	Trachea	Adult Trachea
HZ	Human	Brain Thalamus	Adult Brain Thalamus
I	Human	Blood	PeripheralBloodMononuclearCell
IA	Human	Thyroid	Adult Thyroid
IB	Human	Embryonal CA	Fetal NT2-D1
IC	Human	WER1-Rb1 line	Adult Retinoblastoma
ID	Human	Muscle	N/A
IE	Human	Brain	19-23wks., M/F pool of 5
IF	Human	Uterus	N/A
IG	Human	Testes	10-61yrs., pool of 11
IH	Human	Muscle	N/A
II	Human	Brain	N/A
IJ	Human	Blood	PeripheralBloodMononuclearCell
IK	Human	Retinoblastoma	Adult Retinoblastoma Y79
IL	Human	Retina	16-75yrs., pool of 76
IM	Human	Various	Various
IN	Human	Prostate	Adult Prostate
IO	Human	Brain	19-23wks., M/F pool of 5
IP	Human	Fetal Kidney2	Fetal Kidney
IQ	Human	Prostate	Adult Prostate
IR	Human	Brain Hippoca	Adult Brain Hippocampus
IS	Human	Trachea	Adult Trachea
IT	Human	Brain Thalamu	Adult Brain Thalamus

SEQUENCE LISTING

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 - (D) STATE: Massachusetts
 - (E) COUNTRY: U.S.A
 - (F) ZIP: 02140
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy Disk
 - (B) COMPUTER: IBM PC Compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER:
 - (B) FILING DATE:
 - (C) CLASSIFICATION:
- (vii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: Brown, Scott A.
 - (B) REGISTRATION NUMBER: 32,724
- (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: (617) 498-8224
 - (B) TELEFAX: (617) 876-5851

(2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

```

GGAGATGTTG AGGTGGCTGC TGACCTGGG TCTCATCTCC TTGATTTTCT TTATCTTCTT      60
CATGCCGTC CTCTCTAGGC TGTCTTTGGC GAGGAGGGCC CCTGCGGAAT CGTGGTCTAT      120
ATCCCCGATA CATATTCTGC CTCACCTGGT TACCTTGTTT TCCTGCACCC TGGTTGTCAG      180
CACCTCCAT CACTTCTCCC TGCACAGGAG GGTGGAATA CTGTGGTCGA CGCCCATAGG      240

```

GTCTCCGCAT GTAGTAAGGT GGGAACCTTC GCCTGCGGTA GGGCCGGCGT TGTTGGGCCT	300
GGCCTTCGGG AGCACTCTCC GATCCCTCGT TCTTTTCCCC ACTCTCACTA TTCTGGTAAT	360
TTTGCTGGTA ATTGCGTGA GGAGAACAGG TAGACTCGAG	400

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 165 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

GAATTAGTTG CCAGCACTTT AAAAATTGGT ATAGTTCACA TAAATATTCT GAATTCAGGC	60
TTTTGGAAAA GTTGTGGACC CAAGAATACT AGGCCCGCAT TTTCTTACGT CAACATTCTT	120
TCCAGGATGA TGAATGGACT GTTCTCTTTG GCCCCCTATC TCGAG	165

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

GAATTCTAGA CCTTCCTCTC CTACTCCCTT CCTTAGGCTC CTGAACTCGT TTGCTCCTAA	60
ATCTTGTTAA TTCTTTTTCT CTGGATTTTG GTTCTTTTG GCTTCCCTT GCCTTCCCCT	120
TTCTCTGTCT CCAACACTCT TTCCCATGT CTTTCTGGCT GTCTCTATGT TCCTCTTCTC	180
TTATCCTCAA CTTTCTGTCC ATTCGGGCCT CCTCCCCACC TCCCACGCC CAGCCCCTCC	240
CTCCTTGGTC TCCTTTTCGA TATGCCAAAC CAATTTTGGG TCGAGTGCAT TCCCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

GCGATTGAAT TCTAGACCTG CCTGGATTGC CTTCTGTTGT GGTAGACAAA TCACCATTAA	60
ATGACTAAGT TTCACTGTTT TATGTGTTAA TGATCCTTAA TAACAAAAAG TTTTAAAGTC	120
TTAATTTTCGT AAGATTATGT AAAGGTTAAG AAAGAAATTT TAAGTGAAAA TGATAAAACC	180
AAGCAAATGT TTATTAGTTC AATTGTTTTT CTTTATATCT TGCAGCAACG CACATCTCGA	240
G	241

(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

```
GAATTCGGCC TTCATGGCCT AGGAAATGAC TTTATTGTGG TTGAATTAGT TAAAGGGTAC      60
TTACATTACG TGTTTGATTT GGGAAATGGT GCTAACCTCA TCAAAGGAAG CTCAAATAAA      120
CCTCTCAATG ACAATCAGTG GCACAACGTG ATGATATCAA GGGACACCAG CAACCTCCAC      180
ACTGTAAAGA TTGACACAAA AATCACAACG CAAATCACCG CCGGAGCCAG GAACTTAGAC      240
CTCAAGAGTG ACTTATATAT AGGAGGAGTA GCTAAAGAAA CATACAAATC CTTACCAAAA      300
CTTGATCATG CCAAAGAAGG CTTTCAAGGC TGCCTGGCAT CAGTTGATTT AAATGGACGG      360
CTCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

```
GAATTCGGCC TTCATGGCCT ATAAAATTTA AAAATGCTAA GGATCTGGCC CCACAGGCCC      60
CAAAGCTTTC ACAGAGCTCC TCTTAGACAT GAAGATGCCC ATTGGCCTCC TAGGTCCCAG      120
GAGGTGTGGG CAGGACTGCC CTTCTCCGT TCTCATTGCG GGGCTCCTGA AGGGGGTATC      180
TGAAAGTATG TAAATCTGAT GGGAGGTCTG ATCCTCCTTT TGCTAGCCCC TGAATCTGT      240
GGTGGAGTCT GGCTGATGGC CAGGGCCATG TCCTAGAGGG GACTCCCCTG CAGGAGGCGG      300
GCTCTAAAGG GAGTGGTGTC CCTTTAGGCC AGGGTTCACA GTCGGGGTGG TCTGGAGACT      360
GCAGGACTCA GGGCCTGGGG GTGGCATCAG TCTGGCCAGG CCCTGCGTCA CTTGCACCCA      420
CTGTCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

```
GGGTGGCTCA TGCCTGTAAT CCCGGCACTT GGGTAGGCCA GGGCAGCAGG ATCGCTTGAG      60
CCCGGGAGTT CGAGACAGCC TGGGCAACAT GGTGAGACCC TGTCTCCATA AAATTTTSTA      120
AAAAATTGCC AGGTGTGGTC GTGTGTGCCT GTGAGGCTGA GGTGGGAGGC TCGCTTGAGC      180
CCAGGGGTCA AGGTGCAGT GAGCCATGAC TGCACGCCAC TGCACTCCAG CGTGGGTGAC      240
AGAGTGAGAT ACTGTATAAA AAAAAAAGC TAAACAAAA CAAGAAGTAT TATCTTAAGC      300
ATGTTATTTA GAAATATGGA GATAAATAA AATAACTGAA AGTAGGTCGT TGCTTCTGAG      360
GAGAGAAATT GGGAGTTGGC AAGGTCTCGA G
```

(2) INFORMATION FOR SEQ ID NO:8:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 351 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

```
GCTTTTGGAG CTGCTAAAAT GCCGGATTAC CTCGGTGCCG ATCAGCGGAA GACCAAAGAG      60
GATGAGAAGG ACGACAAGCC CATCCGAGCT CTGGATGAGG GGGATATTGC CTGTTGAAA      120
ACTTATGGTC AGAGCACTTA CTCTAGGCAG ATCAAGCAAG TTGAAGATGA CATTAGCAA      180
CTTCTCAAGA AAATTAATGA GCTCACTGGT ATTAAAGAAT CTGACACTGG CCTGGCCCA      240
CCAGCACTCT GGGATTGGC TGCAGATAAG CAGACACTCC AGAGTGAACA GCCTTTACAG      300
GTTGCCAGGT GTACAAAGAT AATCAATGCT GATTGCGAGG ACCCACTCGA G      351
```

(2) INFORMATION FOR SEQ ID NO:9:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 354 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

```
GTGATGTGTC ACCCAAGTG CTCCACGTGC TTGCCAGCCA CCTGCGGCTT GCCTGCTGAA      60
TATGCCACAC ACTTCACCGA GGCCTTCTGC CGTGACAAAA TGAATCCCC AGGTCTCCAG      120
ACCAAGGAGC CCAGCAGCAG CTTGCACCTG GAAGGGTGGA TGAAGGTGCC CAGGAATAAC      180
AAACGAGGAC AGCAAGGCTG GGACAGGAAG TACATTGTCC TGGAGGGATC AAAAGTCCTC      240
ATTTATGACA ATGAAGCCAG AGAAGCTGGA CAGAGGCCGG TGAAGAATT TGAGCTGTGC      300
CTTCCCGACG GGGATGTATC TATTCATGGT GCCGTTGGTG CTTCCAACT CGAG      354
```

(2) INFORMATION FOR SEQ ID NO:10:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 432 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

```
GAATTCGGCC TTCATGGNCT AGGAGGAGGA AGAGGAGTAC GAGGATGACG AGGGAGGAGG      60
GGGAAGACGA GGAGGAGGAG GAGGCTGCGG CAGAGGCTGC CGCGGGGGCC AAACATGACG      120
ATGCCACGC CGAGATGCCT GATGACGCCA AGAAGTAAGG GGGGCAGAGA TGGATGAAGA      180
GAAAGCCCAC GAAGAAAAAA GCCTGGTTTT GTTTTCCCA GAATATCGAT GGACTTAAAA      240
AGGCTCAGGT TTTTGACCAA AATACAATGT GAATTTATTC TGACATTCCT AAAATAGATT      300
AAATTAAAGC AATTAGATCC TGGCCAGCTC GATTCAAATT TGACTTTCAT TTTGAACATA      360
ATAAATATAT CAAAAGGTGT TAAAGAAAAC TGAATTAAAC CAAAATTAT GTTTTCATGG      420
TCTCTCCTCG AG      432
```

(2) INFORMATION FOR SEQ ID NO:11:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 687 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

```
CTATTTTACA TGCCACCAG CATGTATGG GGCTTCTCAC TTGTCCACAT GCTTGCTGT      60
GTCATATTTG ACTTAAAGCT TATTTTGACG GGAAACCAAT TTGTCTTTT TTTGGAAAGG    120
GATGGCACCA CAGATGTGAC GCGGACAATG CATTTTGGGA CCCCTACAGC CTACGAGAAG    180
GAATGCTTCA CATATGTCCT CAAGGGCCAC ATAGCTGTGA GTGCAGCCGT TTTCCCGACT    240
GGAACCAAAG GTCACCTTCT TGA CTCTTTT GCCCGTTCAG CTTTATGGGA TTCAGGCCTA    300
GATTACTTGC ACGGGACTGG ACATGGTGTG GGGTCTTTT TGAATGTCCA TGAAGGTCCT    360
TGCGGCATCA GTTACAAA.C ATTCTCTGAT GAGCCCTTGG AGGCAGGCAT GATTGTCACT    420
GATGAGCCCG GGTACTATGA AGATGGGGCT TTTGGAATTC GCATTGAGAA TGTGTTCCTT    480
GTGGTTCCTG TGAAGACCAA GTATAATTT AATAACCGGG GAAGCCTGAC CTTTGAACCT    540
CTAACATTGG TTCCAATTCA GACCAAAATG ATAGATGTGG ATTCTCTTAC AGACAAAGAG    600
TGCGACTGGC TCAACAATTA CCACCTGACC TGCAGGGATG TGATTGGGAA GGAATTGCAG    660
AAACAGGGCC GCCAGGAAGC TCTCGAG                                     687
```

(2) INFORMATION FOR SEQ ID NO:12:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 420 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

```
GAATTCGGCC TTCATGGCCT AGTCGGTGGG TGCCTGTAGT CCCAGCTACT TGGGAGGCTG      60
AGGGAGGAGA ACTGCTTGAA CCCGGGAGGC AGAGGTTGCA GTGAGCCGAG ATTGTGCCAC    120
TGTAATCCAG CCTGGGCCAC AAAGCAAGAA TCTGTCTCAA AAAAAAAAAA AAGAAAAGAA    180
AAGAATAAAT TTCTTTTCCC CTTGAAGAAG TTGATTTAGG CACAGACTCT GGACTCTGGA    240
TTTCCACAA TGTCTTATCT AGTCAACTCA AGTATCTGGA CTACAATTTT CTTGAAAGCA    300
AAGCCCATAT ATTAATAATC TTTACTTGTA TATAAATATT CAATAAATCA TTAAGTAAAT    360
GTGTAGAAGA ATTTTATGCT CAATAAGATC CACCCGATCA TGCATTTGAA AATTCTCGAG    420
```

(2) INFORMATION FOR SEQ ID NO:13:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 379 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

```
GAATTCGGCC TTCATGGCCT AGCACATACT CTGCTTTTCT GTCAACATCC CATTTTGGGG      60
AAAGGAAAAG TCATATTTAT TCCTGCACCC CAGTTTTTTA ACTTGTTCTC CCAGTTGTCC    120
CCCTCTTCTC TGGGTGTAAG AAGGGAAATT GGAAAAAAAA TTATATATAT ATTCTCCTTT    180
TAATGGTGGG GGGCTACTGG AGAGGAGAGA CAGCAAGTCC ACCCTAACTT GTTACACAGC    240
```

ACATACCACA GGTTCCTGGAA TTCTCATCTT CGAACCTAGA GAAATAGGTG CTATAAACAG	300
GGAATTAAGC AAAATGCTGG ATGCTATAGA TCTTTAATT GTCTTAATTT TTTTCTATT	360
ATTAAACAAC AGGCTCGAG	379

(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

GTTTCATGGCC TACGGAAAGT CAGCATGGAT AACAGACTGA TGGAACTCTT TCCTGCCAAT	60
AAGCAAAGTG TTGAACACTT CACAAAATAT TTTACTGAGG CAGGCTTGAA AGAGCTTTCA	120
GAATATGTTT GGAATCAGCA AACCATCGGA GCTCGTAAGG AGCTCCAGAA AGAACTTCAA	180
GAACAGATGT CCCGTGGTGA TCCATTAAAG GATATAATTT TATATGTCTA GGAGGAGATG	240
AAAAAAAACA ACATCCCAGA GCCAGTTGTC ATCGGAATAG TCTGGTCAAG TGAATGAGC	300
ACTGTGGAAT GGAACAAAAA AGAGGAGCTT GTAGCAGAGC AAGCCATCAA GCACTTGAAG	360
CAATACAGCC CTCTACTTGC TGCCTTTACT ACTCAAGGTC AGTCTGAGCT GACTCTGTTA	420
CTGAAGATTC AGGAGTATTG CTATGACAAC ATTCATTTC TGAAGGCCTT CCAGAAAATA	480
GTGGTGCTTT TTTATAAAGC TGAAGTCCTG AGCGAGGATG CCCTCGAG	528

(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

GAATTCGGCC TTCATGGCCT AGCCCAGGCC ACGCTACACT CTGCCACAC TGGTGAGCAG	60
GAGGTCTTCC CACGCCCTGT CATTAGGCTG CATTACTCT TGCTAAATAA AAGTGGGAGT	120
GGGGCGTGCG CGTTATCCAT GTATTGCCTT TCAGCTCTAG ATCCCCTCC CCTGCCTGCT	180
CTGCAGTCGT GGGTGGGGCC CGTGCGCCGT TTCTCCTTGG TAGCGTGCAC GGTGTTGAAC	240
TGGGACACTG GGGAGAAAGG GGCTTTCATG TCGTTTCCTT CCTGCTCCTG CTGCACAGCT	300
GCCAGGAGTG CTCTGCCTGG AGTCTGCAGA CCTCAGAGAG GTCCCAGCAC TGGCTGTGGC	360
CTTTCAGGTG TAGGCAGGTG GGCTCTGCTT CCCGATTCCC TGTGAGCGCC CACCCTCTCG	420
AAAGAATTTT CTGCTTGCCC TGTGACTGTG CAGACTCTGG CTCGAG	466

(2) INFORMATION FOR SEQ ID NO:16:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

GAATTCGGCC	TTCATGGCCT	AGCGTGATCC	TGGAACGTGC	TCTAGTTCGA	GAGAGTGAGG	60
GCTTTGAGGA	GCATGTACCA	TCTGATAACT	CTTGAAGATA	CAGAGAGAAA	TCCATCTTTT	120
CCCAGGTCTC	CTTCACTGAA	AACAAAAATC	TACTTACATA	CACTGTCACC	TTAGCATCAG	180
AGTCGGATTA	ATGAAGTGG	GAACAAGAGG	TTGTGAGAAT	CTAAGATGGA	ACCTTTCTTT	240
CTTCTCTTCT	TTTTTTTAA	ATTTTGTATT	TTCCATCCAA	CACTCGAG		288

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

GAATTCGGCC	TTCATGGCCT	AGGGCTCTGC	TTATAAACTT	CAAAGTTACA	CTGAAGGATA	60
CGGTAAAAAC	ACCAGTTTAG	TAACCATTTT	TATGATTGG	AATACCATGA	TGGGAACATC	120
TATACTAAGC	ATTCCTTGGG	GCATAAAACA	GGCTGGATTT	ACTACTGGAA	TGTGTGTCAT	180
CATACTGATG	GGCCTTTTAA	CACCTTTATTG	CTGCTACAGA	GTAAGTAAAT	CACGGACTAT	240
GATGTTTTCA	TTGGATACCA	CTACCTGGGA	ATATCCAGAT	GTCTGCAGAC	ATTATTTCGG	300
CTCCTTTGGG	CAGTGGTCCA	GTCTCCTCTT	CTCCTTGGTG	TCTCTCATTG	GAGCAATGAT	360
AGTTTATTGG	GTGCTTATGT	CAAATTTTCT	TTTAAATACT	GGAAAGTTTA	TTTTTAATTT	420
TATTCATCAC	ATTAATGACA	CAGACACTAT	ACTGAGTACC	AATAATAGCA	ACCCTGGTCT	480
CGAG						484

(2) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

GAATTGGCCT	TCATGGCCTA	GGAGATATAC	CTAATGCTAG	ATGATGAGTT	AGTGGGTGCA	60
GCGCACCAGC	GTGGCACATG	TATACATATG	TAACCTAACCT	GCACAATGTG	CACATGTACC	120
CTAAACTTAA	AAGTATATAT	AAAAAAAAAA	GACNTCGCTA	GTGAGCACGC	TGTATACGAC	180
ATCGCTAATG	AGGACACCAT	ACAAGGCATC	GCTAACGATG	ACGCTGTACA	CAACATCACT	240
AATGATGACA	CCGTATAAGA	CATCGCTAAT	TATGACGCTG	TATACGACAT	CGCTAATGAC	300
ACCGTACGAG	GCACGCTAAC	AAGGATGCTG	TACACAACAT	CGCTAATGAG	GACAGTGTAC	360
AAGCCATCGC	TAATGAGGAC	ACTGTATATG	ACATTGCTAA	CGAGGACACT	GTACAAGGCA	420
TTGCTAACGA	GGACGCTGTA	CACAACATCG	CTAATGACAC	CATATAAGAC	ATCACCAATG	480
AGGATGCTGT	ATATGACATC	GCTAATAACA	CCGCTCGAG			519

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

GCAGCTCTCA	TCCTCGTCTC	CCCAACACCA	TAACGTCCTC	ATCCCGCCTC	CAACCCACAC	60
CAGGCCGAAG	CCCTCAGAGA	GTGTTTTCAT	CAGGAACCAC	TCTCGAACCT	GAAGGTTGAC	120
TTTAGCGTTT	AGCAACCCAG	GGCGGTGTGT	GTGTTTCCCG	TTTGTTTTTC	TGAGTGGTAG	180
CAGTGATCAC	CGTAATTCCA	TGTAGCCATG	TGCTAGCAGA	ACCCCTGTGT	CCTCACCGTG	240
GCCCGTGTGA	CCCCAGCCGA	CGAGTGCCCG	GCGGAGTCCC	CGCTGCCTTC	CCATGGTCCA	300
GTGAGCTGCC	AGGGCATCAC	ATGACTCTCA	GCTGGGCTCG	AG		342

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

GAATTCGGCC	TTCATGGCCT	AGAGCAGCTC	TGAGGTAGAA	ATTACAACGA	TGAAAAGAGC	60
ACAACGTACA	AAACCAAGAA	AGAGTCTGTT	GTGTGAAGGG	TCATTCGATG	AAGAAGCTTC	120
TGCACAGTCC	TTTCAGGAAG	TGTTAAGTCA	ATGGAGAACC	GGAAATCATG	ATGACAACAA	180
GAAACAGAAT	TTACATGCAG	CAGTAAAAGA	CTCATTTGGAA	GAATGCGAAG	TACAGACTAA	240
TCTGAAAATT	TGGAGAGAAC	CACTTAATAT	TGAACTTAAA	GAAGACATTC	TATCCTATAT	300
GGAAAAATTA	TGGCTTAAAA	AACACAGGAG	AACTCCACAA	GAGCAACTTT	TTAAATGCT	360
ACCAGATACG	TCCCCACATC	CACATGAAAC	CACTGGTGAT	GCACAGTGTT	CTCAAAATGA	420
AAACGATGAA	GATAGTGATG	GTGAGGAGAC	CAAAGTACAA	CACACAGCTC	TTTTATTGCC	480
AGTAGAAACA	TTAAACATAG	AGAGACCTGA	ACCATCTCTA	AAGATAGTCG	AACTGGATGA	540
TACTTATGAA	GAGGAATTG	AAGAAGCAGA	ACATCTCGAG			580

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

GAATTCGGCC	TTCATGGCCT	AGAAAGATCT	AATTATCATG	GACCTGCGAC	AGTTTCTTAT	60
GTGCCTGTCC	CTGTGCACAG	CCTTTGCCTT	GAGCAAACCC	ACAGAAAAGA	AGGACCGTGT	120
ACATCATGAG	CCTCAGCTCA	GTGACAAGGT	TCACAAATGAT	GCTCAGAGTT	TTGATTATGA	180
CCATGATGCC	TTCTTGGGTG	CTGAAGAAGC	AAAGACCTTT	GATCAGTTGA	CACCAGAAGA	240
GAGCAAGGAA	AGGTTTGGAA	AGATTGTAAG	TAAAATAGAT	GGCGACAAGG	ATCGGCTCGA	300
G						301

(2) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

```
GAATTCGGCC TTCATGGCCT AAAAAAGGA TGGTGTGTTG AGACCAGAAG CAGCAGCAGT      60
CCTCGACATC AACTACAAC TCCCTTCGCA CAGTGCATAC CCTCTGATAT ACTGAACCCA      120
ACGCCATATC TCCAGCCCC TAAGAACTAG AGAGGGAGCC TCACAACATT CCAATTAAAT      180
CCTTCAGAAA ATTCATTACT CTTCAAAGTT GTCTGTGGTT TTGTGACAAC GATATGACTA      240
GGTGCAAAAT GGCTTGCAAC TAATTAACAA ACATAGAAGC ATCCAACAAA CATATACGTG      300
CACAACTCTG GGATTAGGG ATGAAGCTCG AG                                     332
```

(2) INFORMATION FOR SEQ ID NO:23:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

```
GAATTCGGCC TTCATGGCCT ACCAGCCTGG GCGACAGAGC AAGACTCAGT CTCAAAACAA      60
AACAAACAA AACAAAAAGA GAAGGCTATT ATTAACATTC GAGATAATGT GCCAGACTGC      120
TTCCATGTAT TTTCAATTAT CTGTCCCAA TCTGGTGAAG TGGGTATCTG CACAGCTTTC      180
TCTAGATTGA ACAACTAGTA AGGGGGCTGG CCCTGGAGAA AGTTACCTCC TGCCTCGAG      239
```

(2) INFORMATION FOR SEQ ID NO:24:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

```
GAATTCGGCC TTCATGGCCT ACTTTTATAT TGTTATTTTT GTAAAGCATC TTTTCTTCAA      60
TTCTTGTGTTG CATTCTGGGC CAAAATATTT CAGGTTGGTT CGGTGTGGAG TTAAGAAAAG      120
CAGGCGTTTT AGTGGAGAAA TGGGGAACAG CATCAAGAAA GGCTTTTTTC CTTTTTCTT      180
TTTTTTTTTG AGACAGAGTC TTGCCGTGC ACCCAGGCTG GAGTGCAATG GTCTCGAG      238
```

(2) INFORMATION FOR SEQ ID NO:25:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

```
GAATTCGGCC TTCATGGCCT AGATGGATTT CTTAATTGAA GTACTTTTAT AATCACAGTG      60
```

ACTGAACAAA ATATTTTCAA AGACATTGT CATTCTTAA AGCCAAGATT TTAAAGACTA	120
ATGTCCTTCC TGAGGGTTAC TTTACTATAC TGTGTATGGT GTATAGCCAC AGAAAGTCAG	180
TCTGATAAAT TTTCAATGTG TAAGTGTGAT GCATTCAACC CAGATCTCGA G	231

(2) INFORMATION FOR SEQ ID NO:26:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

GAATTCGGCC TTCATGGCCT ACACAGAGTA TATTTATAGC TATCTCAGGG TCCTTGTC	60
ATTGTCTGTG TCATTCTTC ATCTGCTTCT ACTGATTTT TCTGCTTCTG TTTACTCTTC	120
ATTTTGGACC TATTTCCCT TATTTGGTGC TTGCATACA ATTTGTTGGG ACTGGATCTT	180
TGCTAGTCCT TTAAATGTTT TTAAGCTTTG TTTTGGGATG CAGTTAGGTG ACTCAGAAAC	240
AATCAGAAAC AATTGATCC TTTATGTCT CTTAAGCTTT GTTATAGGCA GGACCAGAGC	300
TCTCGAG	307

(2) INFORMATION FOR SEQ ID NO:27:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

GAATTCGGCC TTCATGGCCT ACAATAATAG CCTCCACCT GGTCTTCCTT CTTCAGTCTC	60
TTTCTCTTT CCCAAAGCTC TTGAATCCTA CATGAACCCA TGCCTCGGTC AAAATATTAC	120
AGGCTGCAGC CAATCTTCAA GTGGCATAA GGCCAAACAT CCATTTATAA TATGGTTGGA	180
ATTCCTAACA CATTTTATCA TAGATCTAAT GCCATACAAT AGGTGGAGGT TAGATCTCA	240
CGCAACTCTC GAG	253

(2) INFORMATION FOR SEQ ID NO:28:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

GAATTCGGCC TTCATGGCCT ACAGAGAACT TGTGTTCCGG TTTATTGAAG TTCAGACACT	60
TCTCTCGCT CCATTCTGTC CACATTGTG TGAGCACATC TGGACACTCC TGGGAAAGCC	120
TGACTCAATT ATGAATGCTT CATGGCCTGT GGCAGGTCCT GTTAATGAAG TTTTAATACA	180
CTCCTCACAG TATCTTATGG AAGTAACACA TGACCTTAGA CTACGACTCA AGAATATAT	240
GATGCCAGCT CGAG	254

(2) INFORMATION FOR SEQ ID NO:29:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 211 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

```
GAATTCGGCC TTCATGGCCT ACGAGAAGGA GTGGAAGAGT AAGCAGACTA GGAAAATACA      60
GTACAACCAT CAGGCAGCAT TACAGACCCA CTTAAGGTTT GTGGCCATGT GTGGTTGTGT      120
GGTTTTTTTT CTGGCCATGC TCAGTTACAT AGGGGCAAGT GCAAAAAAAA CCCCAGAGTT      180
TGTTTAACT AGAGCTCTGG TTTGCCAAA C                                211
```

(2) INFORMATION FOR SEQ ID NO:30:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 521 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

```
GAATTCGGCC TTCATGGCCT AGGATCAGGT TCGTCCTTTA GTGTTGTGTA TGGTTATCAT      60
TTGTTTTGAG GTTAGTTTGA TTAGTCATTG TTGGGTGGTG ATTAGTCGGT TGTTGATGAG      120
ATATTTGGAG GTGGGGATCA ATATAGGGGG AAATAGAATG ATCAGTACTG CGGCCGGTAG      180
GCCTAGGATT GTGGGGGCAA TGAATGAAGC GAACAGATTT TCGTTCATTT TGGTTCCTCAG      240
GGTTTGTAT AATTTTTTAT TTTTATGGGC TTTGGTGAGG GAAGTAGGTG GTGGAGCACA      300
GGCACTGCAG GTCAATGGAG GTGGAGTACA GGGACTACAG GTCAATGGAG GTGGAGCACA      360
GGGACTAAAG GTCAATGGAG GTGGGGCACA GGGACTACAC GTCAGTGGAG GTGGAGTCAC      420
AGGGACTACA GGTCAGTGA GGTGGAGCAC AGAGACTACA GGTCAGTGA GGTGGGGCAC      480
AGAGACTACA GGTCAGTGA GGTGGAGCAC AGAGACCACA G                                521
```

(2) INFORMATION FOR SEQ ID NO:31:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 238 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

```
GAATTCGGCC TTCATGGCCT AAAATTTCCT CTAAGTACTG ATTTAGCTGC ATTGTATAAG      60
TATATGCTTC CATTTTCATT CATTTCCAAA TATTTTCTAA TTTCTTTGC AATTTTTTTT      120
TCAGGAATTC GGCCTTGCT GTGTTGCCCA GGCTGGAGAG CAGTGCCACT ATCAGAGCTC      180
ACTATAAAT CAAACTCTG GGCTCAAGCA ACCCTCCCAC CTCCCAACTC CCCTCGAC        238
```

(2) INFORMATION FOR SEQ ID NO:32:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

```
GGTTTCTTAA AAAAAAAAAA AAAAGGAATT TGATCCAGAG CAATTTTCT CAATTAAAT      60
TTGTGATTAC ATTTCTGAGT TTCCATGGCA GAGTTGTGAG TGGGGCTGTG ATATAATTTA    120
ACTTCTCCTA AATTGCTGAC ACCGATAACC CTATAAATTA ACAGATGGCG GAGGGAAATC    180
TCCTGGCTTC TTCCTGGCTA GTTTTTTTTA ATGGTCTGAT TTTGTAATA GGGGTTTGA     240
GTCCCAGCCG ACTCGAG
```

(2) INFORMATION FOR SEQ ID NO:33:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

```
GAATTCGGCC TTCATGGCCT AAAGACTTAC GTTATATTTT CATATACTCC TTCCACTCT      60
TAGTGTGTTG TCAATATACA TTTTGTTTAA CATGTAAAAA CACCACAGTA TATTGTTCTT    120
AATTTTGCTT TTAATAGTAA ACTGTCTTAT AACAAATTAT GAAAATGGAA AAAAACATGT    180
CTTCTTATT TGCCCTCATA TTTATCCATT TAGGCACTCT TCCTTTTCC CTTTCATTCC     240
AGGTTCTCGA G
```

(2) INFORMATION FOR SEQ ID NO:34:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

```
GAATTCGGCC TTCATGGCCT ACTAACATTT ATGAAAATTA TTTGTAAATA AAATAAGAGG      60
CATTGAGATT AAAATTGGAG ATAAAGTTGC TGATGTGTTG TTTTCCTGAA GTATTTTTTT    120
TCTTAATTCT GATCTTTGTT TCCCAATACA ATCACACTCA CACCCTTGCA GTTCAGTTTC    180
CTGACGACTC TCTAGTGTGC CAGATCTGTG TTTCTATGTC AGTGATCTGT TCCCACATCTC    240
TCGAG
```

(2) INFORMATION FOR SEQ ID NO:35:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

```
GAATTCGCTT CATGGCCTAC CGAGAAATGG GTGTGATTGC TGCCATGAGA GATGGTTTTG      60
GTTTCATCAA GTGTGTGGAT CGTGATGTTT GTATGTTTCTT CCACTTCAGT GAAATTCTGG      120
ATGGGAACCA GCTCCATATT GCAGATGAAG TAGAGTTTAC TGTGGTTCCT GATATGCTCT      180
CTGCTCAAAG AAATCATGCT ATTAGGATTA AAAAATTCC CAAGGGCACG GTTTCATTTT      240
ATTCCCATTG AGATCACCGT TTTCTGGGCA CGGTAGAAAA AGAAGCCACT TTTTCCAATC      300
CTAAAACCAC TAGCCCAAAT AAAGGCAAAG AGAAGGAGGC TGAGGATGGC ATTATTGCTT      360
ATGATGACTG TGGGGGTCTC GAG                                              383
```

(2) INFORMATION FOR SEQ ID NO:36:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

```
GAATTCGGCC TTCATGGCCT ACTGCCGCTC CTGGTGCTGC TTGTGTGCTC GTTTGGTGCG      60
GACCTGGTAC CTCTTTGTG AAGCGGCAGC TGAGGAGACT CCGGCGCTCG CCATGGCCGA      120
CGAAAAGCTC GAG                                              133
```

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

```
GAATTCGGCC TTCATGGCCT AAGGTAGTCT AGGCTCATCT TCATGAGGGA ACTGAGGTCT      60
TGGGGGGTGG GGGTTACCCA AATAGGTTCA CAGAAGAACC AGAAATAAAA CCTGCCTTTC      120
TAGACTGTAA GTCTTGATGAT TGTCATCTAA ATGGTTGTCT CTATACAGCA ACTCATCTCT      180
AGAACTGAAA ATAAGTTTAA ATCCCTCCTC CATCCCAAT AATTCAAGCT GCATTCAGA      240
GAAAACCAGG ACTTTGGAAT CAGACAGCAA CTCGAG                                              276
```

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

```

GAATTTGTGC TCTTAGAGTA GGAGTTGGAA CTATAGGACT TGAAGGCAAG AGCAGGTATC      60
TTATCAAGGA TCTACTCACT CAGTTTCCCT AAAGCTCTCT CTCCAGATCG GATTCAACCG      120
CACATCATGA CAGATGTTCC GGCTACATTT ACCCAGGCTG AGTGTAATGG GGATAAACCA      180
CCTGAAAACG GTCAACAAAC AATCACTAAA ATCAGTGAGG AATTGACTGA TGTGGACAGC      240
CCCCTGCCAC ACTACAGGGT AGAACCCAGT CTGGAAGGTG CACTCACCAA AGGAAGTCAG      300
GAGGAAAGAA GAAAATTACA AGGGAACAGA CTCGAG                                336

```

(2) INFORMATION FOR SEQ ID NO:39:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 385 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

```

GAATTCGGCC TTCATGGCCT AGTCGGAGAA GGACATCCAG GATCTGAAGT TTGGGGTCGA      60
GCAGGATGTT GATATGGTGT TTGCGTCATT CATCCGCAAG GCATCTGATG TCCATGAAGT      120
TAGGAAGGTC CTGGGAGAGA AGGGAAGAA CATCAAGATT ATCAGCAAAA TCGAGAATCA      180
TGAGGGGGTT CGGAGGTTTG ATGAAATCCT GGAGGCCAGT GATGGGATCA TGGTGGCTCG      240
TGGTGATCTA GGCATTGAGA TTCCTGCAGA GAAGGTCTTC CTTGCTCAGA AGATGATGAT      300
TGGACGGTGC AACCGAGCTG GGAAGCCTGT CATCTGTGCT ACTCAGATGC TGGAGAGCAT      360
GATCAAGAAG CCCCGCCCCA CTCGA                                385

```

(2) INFORMATION FOR SEQ ID NO:40:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 245 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

```

GAATTCGGCC TTGCTAAAAA AAAAAAAAAA GAGGCAAGTA ATGTAATATC CCCACCTTT      60
GGTTTTCTTA TCTATAAATA CTGATTAAAA AAAAAAGTAC ACTGTCTGCC TTATAAGCTA      120
AAATGAGTGA ATACAGGCAA AATGCCTTAC ATTTACTTT ACATTTACTA AGCACCCAGA      180
AAATGTTAAC TATGATGACA ATTATGATGA TGATGATATT GATATTTCA AGGAGGGCGC      240
TCGAG                                245

```

(2) INFORMATION FOR SEQ ID NO:41:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 247 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

```

GAATTCGGCC TTCATGGCCT AAATAAAGAT GATTTTGTG CTTAGCAGTT TAAGGTATAT      60
GGCTGCATAT GCAAACTCT TTCCAATTC AGTCGCTACT TTTACTTCTG CCCTTTCTAT      120

```

CCATCGTCTT CATTGTGT GTACAGTGCT GTGTGTAAGC TTATCAGTGT GTTTTTTTAT	180
TTGTATCAGT CATGAAAGTC CTGTTAGGTA TCCAGAGTTC TATTATCTA GCTGTACAGA	240
TCTCGAG	247

(2) INFORMATION FOR SEQ ID NO:42:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 106 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

GGATATGGTA ACTGAGAACC ATTTCTAGT TGAGATAACT CATGTACAGG GGGGGTCACA	60
TGACTCAACA ACACACAGAG CACAGAAGAG AACCAACAAT CTCGAG	106

(2) INFORMATION FOR SEQ ID NO:43:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 237 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

GCGTATTTCC AAGTGATGT ATTTCTAAG ATAGATTTTT TAAAAACAAA AAATCTTAAT	60
TTAGATGATA AGCGATTTTT ACCTTTTTTT TTTTTCAAAA GCAACTTGAT CCTGTAAGTT	120
TTGGCATCTT AAGTGGAAT GTTCATGCAG TTTTGCTGGA TCTTCGCTAT GGCAGTAAAA	180
TGCAATACAG CACTGTGGTT AAGAGTGCAG AACGGAGTCA GTCAGCCTGA ACTCGAG	237

(2) INFORMATION FOR SEQ ID NO:44:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 476 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGGCC TTCATGGCCT AGGGAGTNGG	60
TGTGTCTGTG CATTATTTTG GATCATGGAA GGTGTAGAT GTGTATTCT AACTGTAGAT	120
AATGGAGGAC ACATATTTGG GGAGTTTGA GAGGATGTGT ATGTGTGTGT GTGTGCAGTG	180
TGGTATTTCT CTATGTTTTG GTGGGTGGGG TATGTATCCA TCAAAATATC TCAGATTATC	240
TGATGTAAGA AAATAATTCT GCATCTCAGT GACTTCCAAC AAGGTAGGTT TCTCATGTAT	300
GTTATGTGTC CTCCATTGGT TGGCTTTGAT CAGTTACTGG TCCTGTGCCT TGGATCCAGA	360
TGGATGAAGC GGCCTCATTT GGGACAGGAC TAGAAGGACT TCTCTGCTC AGAGTCATAC	420
ATGGCATTTC TGATCACATT TCATTGCCA TAACAAGTCA TGTGGCCATA CTCGAG	476

(2) INFORMATION FOR SEQ ID NO:45:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

```

GAATTCGGCC TTCATGGCCT AGGCAAATC TGCTGGACTT AACTTCATCA ATGTAGTGGG      60
CTCTGTTTGT GGGGCCAGG CTTTGATGAG TGGTTCAAAC CCCATGCTGG GCTGTAACAC      120
TGGTGCCATA ACTCCTGCAG GAATAAACCT GAGCGGCCTT CTACCCTCAG GAGGTCTGCT      180
ACCAAATGCA CTGCCCAGTG CAATGCAGGC AGCTTCTCAA GCAGGTGTTT CATTGGTTT      240
AAAAAATACT TCAAGTCTCA GGCCCTTAAA TCTACTCCAG CTTCCAGGTG GTTCACTTAT      300
TTTTAACACT CTGCAGCAGC AGCAACAGCA GCTCTCCAG TTTACACCAC AACTCGAG      358

```

(2) INFORMATION FOR SEQ ID NO:46:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

```

GAATTCGGCC TTCATGGCCT AATCATTTTG ACTTTCAGTG CTTTCAATGA CCAGTGGCCT      60
CCAGGGATAA AGCAACTGCT TGGTTTGAG GCGCTCCTCT GCGCTGCTGA GCCATCAGCC      120
TCCAATACGC CAATGCCCAT AGATGCTAGT TACAGCCCTG CTTCTCCTA CATAGGGTTC      180
TGTCATCACT GAGTCTCACC ATTTCCCTCT CCCAGTGTC TTTATTATGT GACACACACA      240
CACGGCACTA TGTTTAAAAA AGCGTGCTCA CTGGCAACCT CTTGGCGTTG TGTGTTTATT      300
CTGTGTTTGT TATTGGTGGT ATCTTGGGGT CGACCGAAAG AGTCAACCTC GAG          353

```

(2) INFORMATION FOR SEQ ID NO:47:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

```

GAATTCGGCC TTCATGGCCT AGGGAGCTAC CAGATGCTGA AGAAAGGGCC CTGGCAGACT      60
GGGTTCAAAC TCAGCCATTG TCAGCTTGGT AACCTTGACC AAGTGTCTTC CCCTCTGTGA      120
GCCTCAGTTT TCTCAATAGT AAGAGGGGAT AACACACTTA CCTCTCATAG CTGTGGACAT      180
GGAGGTGAAA GTGCCGCATA CACTGTAAAG TGTTATATAC GTGTAAGAGA AAAAATCGGG      240
CCAGAGGCTG GGCTTGTGTT AATTGATTCA GGAAATTAC CAGAGGCCCC CTAGATGCAA      300
CGTCCTTTGG GTGTCTGGCA GTGGGCACAA AGATGAACAA AACAGTGCCC CACCCTCACC      360
CCGTCAACCG TCAGTGACG AGTGGGCTGG GTGCTTGCGT CCCACAGTGA GGAAGGCAGA      420
AGGGGTCCCT GCCCTCAAAG GAGGACGATA CTCGAG          456

```

(2) INFORMATION FOR SEQ ID NO:48:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

```

GAATTCGGCC TTCATGGCCT AGCTGCCCCG CAGCACTTAC CGGAGCGACC ATGAGGGTGA      60
CGATTTGAAG CACACACAGG CTTCCCGCCA CCTCCTTTAA ACCGCCGCTG GCTTGCCAGG      120
GACAGACGGC GCGGTTGGCT CCCCAAATT CCGACTGATA CGCGCCTCGG CGAGCGAAAG      180
CAAACGCGGG ATACTCTCGC GTTCTTGATT GGCTGCAGTT GGAATTGATC ACACCTTTTC      240
AGTTGTACTT CAATCCTGAA TTAATCTTTA AACACTTTCA AATATGGAGA TTAATCACCA      300
ACTTCTTATT TTTTGGGCCA GTTGGATTCA ATTTTATT TAACATGATT TTCTATATC      360
GTTACTGTCG AATGCTAGAA GAAGGCTCTT TCCGAGGTCG GACAGCAGAC TTTGTATTTA      420
TGTTCTTTT TGGTGGATT CTTAATGACCC TTTTGGTCT GTTGTGAGC TTAGTTTTCT      480
TGGGCCAGGC CTTACAATA ATGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:49:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

```

GAATTCGGCC TTCATGGCCT AAAGCAAGTG ATTTTCTTTT TTTTAAAGAC AGGGTCTCAC      60
TTGGTCACCC AGGCTGGAGT ACAGTGACAT CATCACGGCT CACTGCAACC TTCGCCTCTT      120
GGGCTCAAGT GATTCCCCCA TCCCCACCC CCCTTCTCAC CCCAGATTG GACTATAGGC      180
GTGTACCAAC ACGCCTGGCA GAGACCGGGT TTTGCCGTTG CCCAAGCTGA TCTCGAACTC      240
CTGAGCTCAA GCGATCTGCC CGTCTCAGCC TCCCCTAAGC AAGCATTTT AAGTTTCTAT      300
GCTGTTTAAAT TTTTAAAC TGATTAATTT ATTTGCATTG TGTGGTCATG GAATATGTTT      360
TTATGATATT GGTGTTTGA GATTGGTGA GTCTTCTTT GTAACCTAGT TAAACCATTC      420
CATATCTTTT TAAAAGGATG TATATTCCTT ATCTGTTAGG GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:50:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 168 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

```

GAATTCGGCC TTCATGGCAG AGTGAAGGG GTTGTAATA TTAGGAGAGA GATAATTCTT      60
AGTGCAATTC TCTGAGGATG AAGCATGAGA TGAATCCATG GCACGAATGG AACAGCTGGG      120
GAAAGCAGGT CAGAATGGAT ATGGATATAA ATACTGTGAG TTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:51:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 228 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

```

GAAGTAAATT ATTACGATTT CCTTAGGTGG TTAATAAATT ACCATTATTT TCTCTATTTT      60
ACAGATCACG AAATGATAAG TAACTTACCG AAAGTTACAT TATTTAAGTT AATCAAATGT      120
TTATTGATTG CCAGACTTTT TTCTAGGCTT AAGCAAATGT TGGAAAATAC TTCTCTGAGC      180
TTCAAAAAT GTTATTCTA CTTGTCAGTG CTGCAGGAGT CTCTCGAG      228

```

(2) INFORMATION FOR SEQ ID NO:52:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

```

GCAGAGTCAA TAGATACTTT AAATTGAAGT AAAGAATTAA AAAAGGAAGT GGATAGTTTG      60
GGTATTAGTT TAGCTAGAAA TACAAAGAAA CTTGACTTCT AGGGCAGTAC AAATTCAAGC      120
CTTCCACAAA CAAACAGTTG AGAGTATGTT TATCTTCTTA AAATGTGTGG GTGCCTTCCC      180
ACCACTTCAC CTGCTCCTCA CTGGTGCTTT GTCCCCTCCC TACTACCATT CCTGTCCCGG      240
TCTCGAG      247

```

(2) INFORMATION FOR SEQ ID NO:53:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

```

GGCCAAAACA AAGCTTATAA AGGTTCTCTG TCCCAACGTA ATTACCTCCA ATCGGCATTT      60
AAAGACATCC GCATTGCTTA CAGCACATCC TAGCCTCATG CTGCCCCAAG GATGGACTCG      120
AAATGAAC TA TTTCCAGAGC GACTTATTCA GGCATTCTGT GGAGCCTCCG TTGCCCTGTC      180
CATCACCGGA GCTTTTGTA TTGCAGCTAT GCCATTGGCC TCCGGCAACC TCGAG      235

```

(2) INFORMATION FOR SEQ ID NO:54:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

GAATTCGCCT TCGTGGCCTA AAAAGAAAAA ATCTAAGGTA GATTGTGCCT TTTGTGCCTT	60
TCCTCTGCTC AAGACCTTTC AGTGGCTTCC CACTTCACTC AGTAAAAGGC AAAAAGTCCT	120
TTTAATAACC TACAAGGCAT TATGTTACCC ACATTGTCCC TGCTCCCCTA CATTGTACTC	180
AAGTCTATGA TCTTTTACC ATTCCTTGTA CAAAGGATTT TCACTGGCTG G	231

(2) INFORMATION FOR SEQ ID NO:55:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

GAATTCGGCC TTCATGGCCT AGAAATATTT TCCTACAAGA GACTGAATT TCAGGAAATG	60
GGATAGAGCT TCTAACCAGT GTATTCCGTC AAGTAAGATA ATAACAGCTG ACCTGCCAAC	120
AGCATTACAG GGAGATTCTT TGCTCAGCTA ACACATTCTT GTTTTCAAA ATTGATGCTT	180
AATTGTAGCT GTTATTCTAA TTTGTGACAT GGAACAACT CATGCTTCAA TCCTTGATAG	240
AGCAAACTC AGAACAGGTT ATGTAAAAAT ATAGTCTGGC TTAGAATTT GTTAATTCAC	300
CTGCTTTGCC ACAGAAAATG GAGACTCGAG	330

(2) INFORMATION FOR SEQ ID NO:56:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 230 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

GAATTCTAGA CCTGCCTCGA GATCTGAACT ATAATCTTTT CCATTCTATC TAGCTCCCAT	60
CCTAAGTCCT CTCCTCCTAA CGTGGAATC TCCTAAAATC TTCTCCTTAT ACTAGGGTTC	120
GAGACATGAG GCTGTCTTTT TGGGCCTTTT GCGTTGTCAC AGTCCCAGAC CACGGAACAT	180
TCTCTCTTCC CCAGGACAGG ACATTCTCTC TTCCCCAGCG CTCCCTCGAG	230

(2) INFORMATION FOR SEQ ID NO:57:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

GAATTCGGCC TTCATGGCCT AAAGGGAAAG TGGGAATATA CACAATGCAN AACTAGCCA	60
CATGCAATCA TGGGAGAACA GAGCCTACTT AAAAATCANA CCCAAGCTTT GCTTCAGAAA	120
TAAGTGGAGT TGAACCCATT CGATCATTTA CGCATGACTT TGCAAAGGTT CTCTGGAGGG	180

```

GGAAGAGGAT CAACCTTCTC TCATACCGCA CAGCAAGGGA ACCAAAGTAA TATAAATCAC      240
TCTTAAAAAT GTCATGTTAC TTTAAGAATA AGCCATACTG CTGGCACCTA GAATATTTT      300
GTGGGTCCCC ATCTCTGGCT TTTCTTGTTT AAATGGCCCC CAGGCTAAGA GGCAGCTGCT      360
CACATCCCTG CAACAAACAT GTTCTTCTCT TTCTGCATAG CCTTCCATT CTCTGAG      416

```

(2) INFORMATION FOR SEQ ID NO:58:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 289 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

```

GAATTCGGCT TCATGGCCTA CTAGACCTGC TCAGTCGTTT CTAATGAATA AAAATCAAGT      60
GCCAAAGCTT CAGCCCCAGA TAACTATGAT TCCTCCTAGT GCACAACCAC CACGCACTCA      120
AACACCACCT CTGGGACAGA CACCTCAGCT TGGTCTCAAA ACTAATCCAC CACTTATCCA      180
GGAAAAGCCT GCCAAGACCA GCAAAAAGCC ACCACCGTCA AAGGAAGAAC TCCTTAAACT      240
AACTGAAACT GTGTGACTG AATATCTAAA TAGTGGAAG TCCTCGAG      289

```

(2) INFORMATION FOR SEQ ID NO:59:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 382 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

```

GAATTCGGCC TTCATGGCCT AATTTGAGGC CTGGGTGGAA CTGACAGGTG GAGTTGAAG      60
GCACATCTGC TAGCTCACAT AGGAAACAGA ATCTCCAGG GAAAAGACAT AGGACCTCTG      120
ACTCTAACTG AGGTTCTGGA TTATTATGAG AGATTTTCAG AAATGGTCTA ATGGTGTGG      180
CTTGCTCCAT ACCATAGATT TTAAGAGACA GTAGAGCTTC TGCGATGAGA TTCCCCCATA      240
AAATAATTAT GGATCTGCAC TGGCAAGCTG GTCTTGCTC CAAAGACCAA GAGTTGGTTT      300
GTGGTGCTGA TTCTGAACCC TTGCGATGCA ACTGTCTGGT AGTAAATGG CTTTGTATGG      360
TAAGAAAGCT TTAATCCTCG AG      382

```

(2) INFORMATION FOR SEQ ID NO:60:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 196 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

```

AAAAAAAAC CAAACCTAT TATTCATTG ACAGATTGTC TTAGAGTTGA TAGCATTAA      60
TAATTGAGTA AGTACAGTCC TTCCTGTTT CCAACGTGCC CTATTTTTTC TTTCTTCTCT      120
ACTTTTGCAT ATGCATTTTC CCTCTTCTT GTTCTTGGT GAATTCCTAA ACCTTTTTTT      180
TCAAAATCAC CTCGAG      196

```

(2) INFORMATION FOR SEQ ID NO:61:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 281 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

```
GAATTCGGCC TTCATGGCCT AACCACATTT TTCTAATTAG TGTCTAGAC TGGCTAGATA      60
AATCAACAAT GAATCAACAG TCTTTAAGCA CATATACAGG TATGATAACT CTGTAGTTAA      120
CTCAAATCCT TGTGCTATGT ATTATTTTGC TCGTAACTC AGAATTCAGG AAGCTACCCA      180
CCCAATCAGT CTTTAGCTGT TTTATTTTCAG TAACAAGTTT ATGCAGAACC TTCCATATCT      240
CTCATAAAAC CAGAGCATTC ATAGAACCAG AACTCTCGA G                281
```

(2) INFORMATION FOR SEQ ID NO:62:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

```
GAATTCGGCC TTCATGGCCT AAAAGATTTG AGCATTTCAA AATTTTAAAC ATAAAAGCAT      60
AAACGTAGAT AAAATGAAGG TGTACTATGA TATCTTCAGT TTTATCAGAA ATGATGTAAA      120
AATTACAACC TCTTTAAAAA GTAGTGTTAA TCATTAAGTT AGAAAATATA TAGCTGGGCA      180
TGGTGGCAGA TGCCTGTAAT CCCAGCTACA TGGGAAGGTG AGGTGGGAGA ATCGCTTGAA      240
CCCAGGCAGT GGAGGATGCA GTGAGCCAAG ATCATGCCAC TGCACCCAG CCTGGGTGAC      300
AGAACAAGAC TCCATNTCAA GGAAAAAAAT AAAGAAAAAT ATATATATGA ACTTCAGAAAT      360
CTGAGGTCAT ATATAGACAG GTCTTCCCCC CGTCTCGAG                400
```

(2) INFORMATION FOR SEQ ID NO:63:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 297 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

```
GAAACCATAG TGGCAGATTT GTAGCAAAAA GAATCTTTGT AACCTTCCCT TTAGATGTCC      60
TGTGTTATGG CTGGGTTTTT CTCAAAGATC ATAGATTGCA GTGTTTATCT CAACTCAGTA      120
TTTCCTTTGA AAATTGAAC TTTCTCTATA TTTTCCTTC CCCCATGCAA ACTTTTGTAT      180
TGTTTTCTG AAATCATAAT TCATTGACT TACCAGTTAA TATTGATACA GGTCTTGAC      240
GTTATGAAGT GCATTGTGTA CATTATCTTG TTTAATTTTC ACAACACTCT TCTCGAG      297
```

(2) INFORMATION FOR SEQ ID NO:64:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

```
GGTCGCAGAA GAGTGTCTAGA ACAATCAGTT AAAGAAGCTC AAAGAAATCT GTGAGAAAGA      60
AAAGAAAGAA TTAAAGAAGA AAATGGATAA AAAGAGGCAG GAGAAGATAA CAGAAGCTAA      120
ATCCAAAGAC AAAAGTCAGA TGAAGAGGA GAAGACAGAG ATGATCCGGT CATATATCCA      180
GGAAGTGGTG CAGTATATCA AGAGGCTAGA AGAAGCGCAA AGTAAACGGC AAGAAAAACT      240
CGTAGAGAAA CACAAGGAAA TACGTAGCA GATCCTGGAT GAAAAGCCCA AGGGGGAAGG      300
TTCCTCCTCA TTCTTGTCGG AAAGTTGCCA TGAGGATCCC TCTGTTTCCC CCAAAGTCGA      360
G
```

(2) INFORMATION FOR SEQ ID NO:65:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 393 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

```
GAATTCGGCC TTCATGGCCT ACTGGGGGAA GAAGGCTGCT TTATGTTTAT TTTTCAAGAC      60
TTTAAAAATA TTTTGTGGTT GTATTGCACT AGGAAATCTC TCCCACCTCT CCCTTTTCTC      120
TTTCTTTCCC TATACAAAAT AAAAGGCCCA CCATAGAGAC TAGGCGGCCG AAAGACTAGG      180
AGGGCTGAGG AAAAGAAATA GGTCTCTGGA GGTGGAATA AAAGTGTGCA GCTGCCTCTT      240
CCTGGCGGTG GATGCTGCTT TGGGAGGGCC AGGGAGGCTG CAGGGGGACA GTGTTGGGAT      300
TGTCAGGAA AAAGGGGTAG GAAGGAAGGT GGAGGGATTG ATCTAGTACC AGGGAGAATA      360
TTCCACTGAA CTGTGATTCT ATGCGGCCTC GAG
```

(2) INFORMATION FOR SEQ ID NO:66:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 335 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

```
GAATTCGGCC TTCATGGCCT AATTGTGTTAT TGCTAGAAAA TACACAGTTT TGAGATTTTT      60
GGGCATAATT GGCCTTAGTG TGTCACCTCT GCATTAAAAT ATAGGTAAAT AATCAGATGA      120
AAGCAGCCAA TAACCTATGG CTTCTGTACT TTCTGGTGAA AGTTTGTGTA ATGTTTTTAA      180
TTTGTAATTT TCTGCTTATA AATTGTGCTT TAAATCACTC CCCTCCTTCC GCGCCCCCGG      240
ACTCCTTCTC CCTCCTTCCC GCGCCCCCAA CTCCTTCTCC CTCCTTCCCG CCGCCGCGAG      300
TCCTTCTCCC TCCTTCCCGC CCGCCGATCC TCGAG
```

(2) INFORMATION FOR SEQ ID NO:67:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

```
GGTGACATAT TTATTGCTTC TGTTTCCAA CTACATCACT TCAACTAGAA GTAAAGCTAT    60
GATTTTCCTG ACTTCACATA GGAGGCAAT TTAGAGAAAG TTGTAAAGAT TTCTATGTTT    120
TGGGTTTTTT TTTTCCTTT TTTTITTAA GAGTATAAGG TTACACAAT CATTCTCATA    180
ATGTGACGCA AGCCAGCAAG GCCAAAATG CTAGAGAAAA TAACGGGATC TCGAG      235
```

(2) INFORMATION FOR SEQ ID NO:68:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

```
GAATTCGGCC TTCATGGCCT ACCACAATCT GTTTGCTTTT CCTCTTTAGA TTCCAAAAAT    60
AACACCCCAA AGGCTACCTT TTCAAATATT CTACAACATC TGCAAAAATC TTTAGTACTC    120
TGTCCTTGGA GTCAGTCAAG AAATTCCACC CCAGAAGTGT AAAAACCAAT CAATAATATA    180
TGACACTGAT TTTCTCTAAA TTATTATTTT TCTTATGGTT GAGTCTCCTG CCAACTTTAT    240
GTTTCCCAAT CGGCTCG      257
```

(2) INFORMATION FOR SEQ ID NO:69:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

```
GAATTCGGCC TTCATGGCCT AGCTGGGCAT GGTGATGCAC GCCTGTAATT CTAGCTACTC    60
AGGTGGGGGG TTAAAGGTGA GGCAAGGTCA GCGGTGAAGT GCAGCTCAGA GGGAGGGGTC    120
AAACATAAAC CAGAACTTAT AGGTCTAGAG GTAAATGGG ATTCTATGGG GGCAGAGGTC    180
AAAGGTGAAG CAGAAGTCAG GGTGAAGGA AGGTCTGCAA AGTTAAAGGT GCGGTTTCCA    240
GAGTCAGAAG GGGTGCTCGA G      261
```

(2) INFORMATION FOR SEQ ID NO:70:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

GAATTCGGCC TTCATGGCCT AGATTGAATT TTAAACACAG TCCTCTCAGA AACTGACTAA	60
AACAGGTTTT AAAATTAGCA AATATTAAGA ACATACGAGT AAAAGTCAGT TTATTTTAGA	120
TAAGTAGGGA TTTAAATTCA ACAAAAATAA ACACATTTTA AACTCCTATA ATACATTTAT	180
TTAAATAAAA TATATTTTGT CCAAAAGAAG TGTAAGTTCA AAGAGTTAAC ATACAGATTA	240
TATCCTATGA GATATAATAA TATTAGAAAC TGGCTCGAG	279

(2) INFORMATION FOR SEQ ID NO:71:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

GAATTCGGCC TTCATGGCCT AGTTACATTT ATAATCAGTG AGGAAAATAT AAACATATACA	60
ATAAATGAAA GGGTCATTGG CCAATTGTTT GGAGGGAAAA AATACACCAT GTTCTAAAAAT	120
AAATTCTAG TGATTATTG TGACTTTTCAT GCATTTGGAT GATTTTAAAG ATTTTATATA	180
AAAATGAAAC CATAGCCTTA CGAGAAGAAA ATATAAGAA AACTTGTAT AGTCTTGGGA	240
GGGGGGATTG TCGAG	255

(2) INFORMATION FOR SEQ ID NO:72:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

GCGATTGAAT TCTAGACCTG CCTCGAGATC GTCTTTTCTA CCTGGATGAG AGCTCTACCA	60
CTTCTTTTCTT TTTGCACACT CATCTCATTC TATGCACTCT TGGGCTGTAA CTGTCATTTT	120
TTTTCCTGTA CACTCGAG	138

(2) INFORMATION FOR SEQ ID NO:73:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

GAATTCGGCC TTCATGGCCT ATCATTGTC ATTAAATCTG TAGATTACAT TGAGCATTAT	60
GGACATCTTC AAAATATTTC AAATTTTGAA CAGGAGCATG CTGAAGAGTG TGTTGTTTAA	120
TTTCTATGTA TTTGTACATT TTTTCTCT ATCTTATACT GCCGAGACCA GCTCAGTCGG	180
GGAGACCCTA ACCCAACGGC AGCTCGAG	208

(2) INFORMATION FOR SEQ ID NO:74:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 268 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

```
GAATTCGGCC TTCATGGCCT ACATGAAACT GTTAGTCACT TCATTCTGT TTCTCCCTG      60
TTGCAACAGC CCATCTTCGT GGAAGAACC AAGCTTTAGG CTTGGCTCTG AACAGCCACA      120
AAGTGACTTG GCTGAGGTCC TGCCATTTTCG CTCATGCTCA GCAGGGGGCA GCAGACCAGG      180
GCAGTTCAGA GTATGGGGTC AAACCCAGGT CCCTGTCCCC ACTCCACCTG TGGATTTACC      240
CTGGATTGGG CAAGCCCAT TACTCGAG                                         268
```

(2) INFORMATION FOR SEQ ID NO:75:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

```
GAATTCGGCC TTCATGGCCT ACGTGAACAA GACCTCCCA AACCTTCAGG TAGTCAACCA      60
CCAGCAAGGC CCCCAACCACA GACACATCCT GAAGCTGCTG CCGTCCATGG AGGCCACTGG      120
GGGCGAGAAG TCCAGCACGC CCATCAAGGG CCCAAGAGG GGACATCCTA GACAGAACCT      180
ACACAAGCAT TTTGACATCA ATGAGCATTT GCCCTGGATG ATTGTGCTTT TCCTGCTGCT      240
GGTGCTTGTG GTGATTGTGG TGTGCAGTAT CCGGAAAAG CTCGAG                                         286
```

(2) INFORMATION FOR SEQ ID NO:76:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 199 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

```
GAATTCTAGA CTGCCTCGA AAATACACTG TTACTATCTT AATCTCAAGA GTGTCATTAC      60
AGTGAGAATC TCATTAAAAA GCATACCAGT GAAATTAATA GCAGTGCTTA TCAAAGAACA      120
CTGAAATCTG TGAGAATCTT TCTAGGAGCA TTCTTTTCTT CTTTtagTTC CAAGTTCAG      180
GTAGGCCATG AAGSTCGAG                                         199
```

(2) INFORMATION FOR SEQ ID NO:77:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 233 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

```
GATTGAATTC TAGACCTGCC TCGAGTTCCA CGTCCATGGC CATCCTGAGC ATGCTGCAGG      60
ACATGAATTT CATCAACAAC TACAAAATTG ACTGCCCCGAC CCTGGCCCCGG TTCTGTTTGA      120
TGGTGAAGAA GGGCTACCGG GATCCCCCCT ACCACAAC TGATGCACGCC TTTTCTGTCT      180
CCCACTTCTG CTACCTGCTC TATAAGAACC TGGAGCTCAC CAACTACCTC GAG                233
```

(2) INFORMATION FOR SEQ ID NO:78:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

```
GAATTCGGCC TTCATGGCCT AAGAATAGAG AAAACGTTTT CAGCAGGCTT CACAGAGAAA      60
CCAAACAATA TTTAGAATAT GACAGCATAT GAAGAGTCTG CTACTCTCCC AGTGACCCAT      120
ACTTTCTCTT CCATCTCTGC TGGTTCTCTC TACTACCGAT TCTTTCTTGC TGTTCTCCTT      180
CTCCATCACC GTGACTTCTA TTGCCTTACT CTAATGTCTT GTCTTCTGTG TTACCCTTCT      240
GTGTGTTTTG CATTGAGAAC TCCCCCTCCG CTCGAG                276
```

(2) INFORMATION FOR SEQ ID NO:79:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

```
GAATTCGGCC TTCATGGCCT AAAAAAAAAA AAAAATCCCT GGCTGAGAAC TATTGGATTA      60
GGGCCTCCNG TACCTATCTT TGAGGGGGAA AGGATGCTAC CATCAACTTT TCTGAATGCC      120
AGGAATGCCT TTTAGTATAG TTATTTCACT TACTATTTTA TAGCATATTT TAATTGTATA      180
GTAAGCATTG TGTCTGTTTT ATGGTAAGGA AACTAAAATT GAGAGATTAG GCTGCTCGTG      240
GTGGCTTATA CCTTGTAATC CCAAGCACTC GAG                273
```

(2) INFORMATION FOR SEQ ID NO:80:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

```

GAATTCGGCC TTCATGGCCT AGCGAAATGA CGAAATCTAG CCCTTTGAAA ATAACATTGT      60
TTTTAGAAGA GGACAAATCC TTTAAAGTAA CATCAGACCC AAAGGTTGAG CAGAAAATTG      120
AAGTGATACG TGAAATTGAG ATGAGTGTGG ATGATGATGA TATCAATAGT TCGAAAGTAA      180
TTAATGACCT CTTCACTGAT GTCTAGAGG AAGGTGAACT AGATATGGAG AAGAGCCAAG      240
AGGAGATGGA TCAAGCATTA GCAGAAAGCA GCGAAGGGCT CGAG                        284

```

(2) INFORMATION FOR SEQ ID NO:81:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

```

GGGAAGTGGG GGAAGACCAT CACAAGATGG AGTGCCAGCA AAAACTGATC AAGGAGCTGG      60
AGGGCCAGAG GGAAGCCAG AGAGTGGCTT TGACCCACCT TACGCTGGAC CTAGAAGAAA      120
GGAGCCAGGA GCTGCAGGCA CAAAGCAGCC AGATCCATGA CCTGGAGAGC CACAGCACCG      180
TTCTGGCAAG AGAGCTGCAG GAGAGGGACC AGGAGGTGAA GTCTCAGCGA GAACAGATCG      240
AGGAGCTGCA GAGGCAGAAA GAGCATCTGA CTGAGGATCT CGAG                        284

```

(2) INFORMATION FOR SEQ ID NO:82:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

```

GAATTCGGCC TTCATGGCCT ACTGTGTTGA CTTGGTGGCT TGCTTGATAA GAAGGTTTGA      60
TGAAGCACAG CAGATATCTC AGCTGCTAAT CCTGTAAGCC CTTTACCCAT TCTCGCTTTT      120
CTCTGCTCTT GCCACATCAT GAATAGATTG GTATACTATT GTGGGATACT TCTAGTTTGA      180
GCACATGATA TAGGTTATGG TTAATGTTCC TTTCCATCTT CCTGGTTACT GATAATGTTT      240
CTTTTCTGTA GATGGGTCTA TTCGATGGAA GAGTTTCAGC TTTGTTTCGT TTATTTCCTT      300
GGGACCTCGA G                                     311

```

(2) INFORMATION FOR SEQ ID NO:83:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

```

GAATTAATCG TAAGAGAACC TCAGCATTGT GCACGATAAG AGAATGTGTC AGTATTTTCTAG      60
GGTTCTACAT TTTATCTGTA AAATGTGACT TTTTTTTTTT TTTATCACAA CAGAAGTAAA      120
ATGTTGCTTT GTACCTGGTG TCTTTTATTA AGAATTTACT CCCCCCATTT CTCACAGAGA      180
ATAACAGTCG GGAGTCATTG TCACAATATA ATAGAAATGT TAGCAACCAG ATTCATGTAA      240

```

GGACTAAGTG GTCCTCATGA ATTGCATTAA GACTCTGTAC TGCTCATATT AACTCCATC 300
CTCTCTGTAG TTTGCTGGGT ATTCTCGAG 329

(2) INFORMATION FOR SEQ ID NO:84:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 312 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

GAATTCGGCC TTCATGGCCT AGAAAGACAT CATTAAAGTN CTTTAAACAT TTAGTTTGTG 60
 GTCATAAGTT GACCTTTATG TGCTTTCTGA ATTGGAAGTT AAAATAATCT TTAATTCATT 120
 ATTTTTCTA CTTCTAGGCC AGTTTGTAGT TTAATATTTA TAAAAGGTTA GATAGTTATA 180
 GATAGGATTA TTTTGCAGTT TTGAACAAC ATACAAATTG TTATAGATT CAGAGTAGGG 240
 CTAATCACAG GAAAGACAAA AGTCAGAATG CTTNAGGTAA GCCCCTTCTC ATTATATAAG 300
 ATCAAGCTCG AG 312

(2) INFORMATION FOR SEQ ID NO:85:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 304 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

GAATTCGGCC TTCATGGCCT AAAAAGTTT AACTTAGAAA AACTAGCAAG GGATTGTTCA 60
 CCCTTACCCC AGTGGTTGGT GCTAGAGAAA AAATGGAGGA TGTCTGTTCC ACGCAGACCC 120
 TGGTGGTTTA AAACACACAT ATAGATGGCT CTGGGACCAT CAAAATAGCA GCAGCAAAGA 180
 GCCACTCCAC CAGCCTCCCC TCCACTCCCC CAGGCCCCAC ACAGCAGAAG GCTCCAGCCA 240
 CTTTTGGGAA GCCTGTAGCC TGGCTCCATC TTGCCCTGTG CCACAAATGC CCATGGCCCT 300
 CGAG 304

(2) INFORMATION FOR SEQ ID NO:86:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 291 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

GAATTTTGAA CACTAAAGCT TTGGATACAC AAATTTATAA CATCTTATTT ATAAATCAGT 60
 GGTGTACAGA AAGCAGAGAT CCCATAATCA AGCATGGCAA ACATGTTGAA GAATATGCTT 120
 ACAATGATTT CTGCTATAGA TTTCATAATG GGGATTGAGA GAAGTAGAGT TATGGTGCTG 180
 GTTCACTGCA TTGATTGGAT CAGGCGCTGG AAATCTCTCC TGATAGATTT TATTCTCACC 240
 TGTGGGGCAA TTTCAGAAAT ATTCTGCTGT AATTTTACAT GTGGGCTCGA G 291

(2) INFORMATION FOR SEQ ID NO:87:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

```

GAATTCGGCC TTCATGGCCT AGCTAGAAAA AAAAAAAAAA AAGCCCTTTT CAGTTTGTGC      60
ACTGTGTATG GTCCGTGTAG ATTGATGCAG ATTTTCTGAA ATGAAATGTT TGTTTAGACG      120
AGATCATACC GGTAAAGCAG GAATGACAAA GCTTGCTTTT CTGGTATGTT CTAGGTGTAT      180
TGTGACTTTT ACTGTTATAT TAATTGCCAA TATAAGTAAA TATAGATTAT ATATGTATAG      240
TGTTCACAAA AGCTTAGACC TTTACCTTCC AGCCACCCCA CAGTGCTTGA TATTCAGAG      300
TCAGTCATTG GTTATACATG TGTAGTTCCA AAGCACATAA GCTAGAAGAA GAAATATTTT      360
TAGGAGCACT ACCATCTGTT TTCAACATGA AATGCCACAC ACATAGAACT CCAACATCTC      420
GAG                                                                                   423

```

(2) INFORMATION FOR SEQ ID NO:88:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 172 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCTT GGGGGGATTA CAGTTCAACA AGAGATTTCAG      60
GCAGAGACAA ATATTCCAAA CTATATCAGG AATTAAGTAG GCTTTGCTGT CCTTTTGCAG      120
CTTTGAGTCA ACCCATATGA GAGTGAATTC TCCGATCCTG TACATACTCG AG              172

```

(2) INFORMATION FOR SEQ ID NO:89:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

```

GAATTCGGCC TTCATGGCCT ACCCGTGTG TCCAGTATAC CTTATAACAC TTAGCCACTT      60
CTCCCCACCC TCCAGAAGGG GTCCACGTTG AATTCTGAAT CATCTTGAAA ATAAGATTCC      120
AACCACAAAA AAAATTTAGC CATTTCCTTA CTAAAAAAA CCAAAAACA AATCTGTTTT      180
ATAATCACAG ATTTTGTAGC AAATTTCTTG TATCAGGAAG AAATACAAAT TTTGTCTATG      240
TTCTCAAGCA GTGTCTCGAG                                                                 260

```

(2) INFORMATION FOR SEQ ID NO:90:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

GAATTCGGCC TTCATGGCCT AAACAAAGAT AAAAATAAAC AGATAGGAGA GCTGAATTCC	60
ATTTCAGTTC CTCATGTATA TGCTTACAAA GTTCCAAATT AAGCTTGGGA CTGGTTCTTA	120
CATGGCAGGT AATCCAAACC TTTTCTATTT ACTGAAGATT TTCAGCTCTC TTACAGAAAT	180
ACACAGGCTA CCATTAAAT TGTAGGGATA AATTTTAAAT TGAATTTGAA AATAAGAGCA	240
AGTACTCGAG	250

(2) INFORMATION FOR SEQ ID NO:91:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 260 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

GAATTGAAAC ACAGAGTTGT TCTGCTGATA GTTTTGGGGA TACGTCCATC TTTTAAAGGG	60
ATTGCTTTCA TCTAATTCTG GCAGGACCTC ACCAAAAGAT CCAGCCTCAT ACCTACATCA	120
GACAAAATAT CGCCGTTGTT CCTTCTGTAC TAAAGTATTG TGTTTGGCTT TGGAAACACC	180
CACTCACTTT GCAATAGCCG TGCAAGATGA ATGCAGATTA CACTGATCTT ATGTGTTACA	240
AAATTGGAGA AAGTCTCGAG	260

(2) INFORMATION FOR SEQ ID NO:92:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 354 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

GAATTCGGCC TTCATGGCCT AATTCATCT TTTTTCCTG GTGCTGCATA AACATATATT	60
AAATGTTGTT ACTGATCCCT AGTACTGTTG ATTTGTGACC CTTCTCCTGA GGGAGACTAA	120
AGCTGCTTGA GCTAAAGGCT TTTGAGACAT CCCATACGGT TCCCTGAACA AAGTTTCTC	180
TCCTGACCTC AGTTCTCTT ATGACCTTGG CAAGTGGGCC CGACTAGTTG GACACTAATG	240
AGGCATCGTA ACATGCCGGC CCCATCCTGT CCATTCTGTT CTCTTTGCCA TCTAGCATT	300
AGTGTGTGT CTTCTAGTG GGCATGAAGA CGGCTTTAAA ACCATCCACT CGAG	354

(2) INFORMATION FOR SEQ ID NO:93:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 493 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

```

GCTGAAAATG CAAAACATGA AGAAAGTGAT TGAGGCAATT CGAGTGGAGC TGGTTCAGTA      60
CTGGGACCAG TGCTTTTATA GCCAGGAGCA GAGACAAGCT TTTGCCCTT TCTGTGCTGA      120
GGACTACACA GAAAGTCTGC TCCAGCTCCA CGATGCTGAG ATTGTGCGGT TAAAAAACTA      180
CTATGAAGTT CACAAGGAAC TCTTTGAAGG TGTCCAGAAG TGGGAAGAAA CCTGGAGGCT      240
TTTCTTAGAG TTTGAGAGAA AAGCTTCAGA TCCAAATCGA TTTACAAAAC GAGGAGGAAA      300
TCTTCTAAAA GAAGAAAAAC AACGAGCCAA GCTCCAGAAA ATGTTGCCCA AGCTGGAAGA      360
AGAGTTGAAG GCACGAATTG AATTGTGGGA ACAGGAACAT TCAAAGGCAT TTATGGTGAA      420
TGGGCAGAAA TTCATGGAGT ATGTGGCAGA ACAATGGGAG ATGCATCGAT TGGAGAAAGA      480
GAGACTCCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:94:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

```

GAATTCGGCC TTCATGGCCT ACACACGGCC AAATTTGAGG GCATTCTCAC ATGTGTTCTT      60
CTCTCAAAAC CACTGGGGTT GACAGATCCA GGAGGCTAAA AAAAAGTGAC CTCTATAAAT      120
CTTTAAAGGT GCTATTTTAA GAANATTGTA TAATTATTTC ACAGTATATC TAAAACAGAA      180
TTAAGGACAA TTTAAATATC TTATGTGACA GCCTTTATGT CTAGTCACAT TTGATGAAAT      240
AAAAAACTTC TGAATCTGAA TAGAAGTTCT ACTGTNTCAG GATTGAACCT GAG

```

(2) INFORMATION FOR SEQ ID NO:95:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

```

GAATTCGGCC TTCATGGCCT AAAAAGACAG GAAATAAGT CTCTTTGTAT CCTTATTAAT      60
CATTTGAAAT TATGCTATAA TATTTTTTAA AACTCACCTG TTTGGTTCTG GGTGAAGCAG      120
TTCCTGAAGG AGTGTTTTGT CAGAATATAT TGTTAGGTGA ATAGAGGGTT CTGTGGCCAA      180
GTAAGTTTGG GAAATAGTGG GTTAGACAAA GTTGAGTTAC TGTGGCCTT TCAGACCTTT      240
GATACGCTAA TGTGCATTTT AAATCTCCAA GAAGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:96:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:

GAATTCTCCA GCCTGGGTGA CAGAGTAAGA CTCCATCTCA AAAACAAAAA AACCCAACAG	60
GATAAAATTT AATAGGAGTA AATATAAAGT TCTACGTTTT GATTTTAAAA ATCTAGGTAC	120
TGTATAGTGT GTATTAGTTG GGGTTCCTTT TTTGAAACTT AATCTTGCCT ATAAAACACA	180
AAAGAGTTTA AGATGATATT GAGACTCCTC CTGTCCTCAT TCCTTTTCCT TCCTAATAGC	240
TCAGTCCTGA AGCTCTTAGG TGAGGCAGAA CAACTCGAG	279

(2) INFORMATION FOR SEQ ID NO:97:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:

GAATTCGGCC TTCATGGCCT AGGATACCTT CATTTCAAGG AGCCTCTTTA CAGTAACTGG	60
GCTAAACATT TTGTTGTCGT CCGTCGGCCT TATGTCCTCA TCTATAACAG TGACAAAGAC	120
CCTGTGGAGC GTGGAATCAT TAACCTGTCC ACAGCACAGG TGGAGTACAG TGAGGACCAG	180
CAGGCCATGG TGAAGACACC AAACACCTTT GCTGTCTGCA CAAAGCACCG TGGGGTCCTT	240
TTGCAGGCCC TCAATGACAA AGACATGAAC GACTGGTTGT ATGCCTTCAA CCCACTTCTA	300
GCTCGAG	307

(2) INFORMATION FOR SEQ ID NO:98:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

GAGCTGTGTC AGCATCGATC AGGGGTCTGT AGACAAAAAT TCCCAAAGAT TTGAGACTTT	60
ATTGGGGGAA ACAGATCACT GCGGGGAAT AAGCCACAGG CCAAAGGAGG AAATGCTGGG	120
ACCAGAAGTC CCGCTTGCCG CCTTTTGCTA AAAGTTCGCG ACGCCTGCTC GGCGTGGGCG	180
CAAGCATAGT GTCGTCGGGG CTCTGCGACG TCTGATTGGC TCTCTGCAGT GCACCGTCGA	240
GGTAGAAGGC TCAGCTCCTA GTCGCTCCCA AATTACTTTG TTGGTGCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:99:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

GAATTCGGCC TTCATGGCCT AGCTTGAGGA ATGACCCAAC TCTCTCTGGA AAGTCACTTT	60
---	----

```

GCCTCTCTGT TCTGGTTCTC TCATTTTATA AAGTGCCTTC TTCCTTTCTG CATTTATAAG      120
TAAACATGAG AAAAATCTGA AAAGACTTCT TCAGGATGTT TAAGGAAACA AATGTTGCTT      180
TCCTTGGGTT GGGTCGTTTC ATAAGAGTGA TGTTTGCCAT AAAACTGGAG CCTCATAGAC      240
GATCCTGCAG GGAGGAAGCT TTCCTTGGTC ACCTGACTCA TGTGTTTATA TATAGTATAG      300
AGGAGAGGTA TTCCAAAAGA CCCGTCGCTT TTCCTGTGTC CCACAGCTGC CTGTAGAGTT      360
GTGGCACCAT AAACTTTAGC AGCTGGAAAT CCTCGAG      397

```

(2) INFORMATION FOR SEQ ID NO:100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

```

GAATTCGGCC AAAGAGGCCT ATTAATTAA TAAAGCCATA TCATACCTCT CTTTAACATT      60
GTTAAAAGGA AACTGTGTGT GTGTATTGT GTTAATGTTA ANTTCTCTTC ATTTTGTGTC      120
TTGGGGGGCT GTTTATTGA GGATGGTCGG GGGGCGGGTG GGTCAGACCC ATCCATCCCC      180
CATGGAAGAC CAGACCCATC CATCCCCCAT GGAAGACCAT TCCCGTGTGT TCAGACTGGC      240
AGGGTACTTC CATAGACAGG AACATTCTGG ATGCTCTGAT GCTGAACACT ACCAGAATCG      300
GCCATGGATT TGCTTTGAGC AAACACCCCG CAGTCAGGAC TTAATCCTGG AAAAAGGACA      360
TCTTCTCGAG      370

```

(2) INFORMATION FOR SEQ ID NO:101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

```

GAAAAAATA GACAAACTA TGATGTAAAA ATGCTTAAAA ACAATTATTC CTCTCTGCTA      60
ATTTTAATGC AAAATAAATG ATGCTAGCAT TTAATATGTT TATATGATCT TGTTTTTAGG      120
ATTGAAATTT TAATACAATG GCCTTTTGTA ACTATTTTTC CTATTATAGC TCAGGTGTTT      180
GAATTCCTC TACCCACCT ATCACCCTA TCCCTAACA AAGAGTCTGG CTTCAATAAT      240
ACTGTTGAAT GAAAATTGGT TCTCTAAATG GTTAACAAGA TGAATCCACA TAAATCATAA      300
TTCAGTACTG AGGAACCGAA TTTATACCCA GCGTCTCGAG      340

```

(2) INFORMATION FOR SEQ ID NO:102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

```

GAATTCGGCC TTCATGGCCT AGATTGAATT CTAGACCTGA TGTGAGAATG ATGGGCTTGG      60

```

```

AGTGTCTCTGG AAATAGCTGG GAGGCCTGTG TGTTTAGGAG CGCCTTAAAC AGTAGGATAT      120
AAGGGCAGAG AAGTAGCTGG GAACTGAGAA GAACTTTGGC TGTTATTCTA GTAAGACTGA      180
AAATTTCAGG TGGGATTTGA ACAGAGATGT GTGGTGATCT GACTTGGTTC ATTCTGCTGT      240
GGTGAAGAGA CTGGAGGTGC GGGGCAAGTA TGAAGCATG GAGACCATT AATTATGGGG      300
GCAATGGTAG AGGGAAGAGA AACAATGCTA TTAAGTGGAG TAGGAGCACA CAGAGAACAA      360
GCCACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:103:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:

```

GCGATTGAAT TCTAGACCTG CCTTGAGATC ACCGAGTGCT TCATCTCTGA CAGTTCCTCT      60
GACCAGATGA CCACAGGCAC CAACGAGAAC GCCGACAGCA TGACATCCAT GAGCACACCC      120
TCAGAGCCTG GCATCTGCCG CTTTACCGCC TCACCACCCA AGCCCCAGGA TGCGGACCGG      180
GGCAAAAACG TGGCTGTGCC CATCCCTCAC CGGGCCAACA AGAGTGAGTG CTCAGACCAC      240
CTCCCAGGCA GTGCCCCCCC GACTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:

```

GAATTCGCCT TCATGGCCTA ATATGCTTAT GAATATGATG TTGATGGACA GCTCCAAACA      60
GTTTACCTCA ATGAAAAGAT AATGTGGCGG TACAACCTACG ATCTGAATGG AAACCTCCAT      120
TTACTGAACC CAAGTAACAG TCGCGTCTG ACACCCCTTC GCTATGACCT GCGAGACAGA      180
ATCACTCGAC TGGGTGATGT TCAATATCGG TTGGATGAAG ATGGTTTCCT ACGTCAAAGG      240
GGCACGGAAA TCTTTGAATA TAGCTCCAAG GGGCTTCTAA CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:

```

GAATTCGGCC TTCATGGCCT ACTTAAATCT TAGATGCTAA TGGGAGAAAC TGATTTTTTA      60
AAAAACAGGG AACTAATTA ACATTTTATC AGATATGCTA TGAAGTAAAC AGTTGAAGAC      120
TGACAGTCCA GTGGATACCG AGGAGTTCCT TTAGATACCC TGGTGAGGTA AGGACACAGG      180
CAAGGGGAGA GCTGAGACCT GAATATGAGG AGAAGCCAGG CGAGCACACA ATAGGGCAGA      240

```

AAGGAGCAGT AGGTCAAAGC CTGAGGCAGG AGAGAGCTTG ACTGACTCGA G

291

(2) INFORMATION FOR SEQ ID NO:106:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 339 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:

GAATTCGGCC TTCATGGCCT AGAAATGGTT CTGAAAGCGA CAGTAGAGAG ATGCAGTTGT	60
GATGATTCA ACAACCTGGA TGTTTTCTTT CTCCTCTTTG CTTCCATTCA TCTCTGTTGG	120
CTGCTGTTGA TGGAGTCAGA CAGTAAACAC GTGGCTTGGA TAACACCCAT CATCCTATGA	180
AGAATATAGG GAGTACTTGT TCTCTGTTGA TTCAACTTTT ATGTCTCCAG TAACATTGCG	240
CTTATGAAGG TACCTGTATT TGTATGGA CTGAATAAAG AAGAATTCAT TTGTTTAGCA	300
AGTATTAGTT CAGCAACCAC TGAGAAACAA GCACTCGAG	339

(2) INFORMATION FOR SEQ ID NO:107:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 439 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:

GAATTCGGCC TTCATGGCCT ACATCATGTC AAAGAGTACT ACATACAGTT TGAATCTCC	60
TAAAGACCCG GTACTACCAG CTCGTTTCTT CACTCAACCT GACAAGAATT TCAGTAACAC	120
CAAAAATTAT CTGCCTCCTG AAATGAAATC ATTTTTCCTT CCTGGAAAAC CTAAAACAAC	180
CAATGTTCTA GGAGCTGTTA ACAAGCCACT TTCATCAGCA GGCAAGCAAT CTCAGACCAA	240
ATCATCACGA ATGGAACTG TAAGCAATGC AAGCAGCAGC TCAAATCCAA GCTCTCCTGG	300
AAGAATAAAG GGGAGGCTTG ATAGTTCTGA AATGGATCAC AGTGAATATG AAGATTACAC	360
AATGTCTTCA CCTTTGCCGG GGAAAAAAG TGACAAGAGA GACGACTCTG ATCTTGTAAG	420
GTCTGAATCG GAGCTCGAG	439

(2) INFORMATION FOR SEQ ID NO:108:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 298 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCGAGAGGCA GGTCTAGAAT	60
TCCAAATGTA AAATTACTA AGGCTTTTCA TGTGGAAGTA GAATGCATAT ATCTTTCTTG	120
ATATAACAAA TGAATTTGGT TGTAAGTAAC GTGTTGTACT AGTAAAGGTC CACCTGCTAA	180
ACTTTTCTT TTTTGTGAG GTATAGACAG TAGAGTGATA CCGATACATG AGGAAAATGA	240
GAACTGGAAT GCAGGCCAAA AGCTGGTCCT TTCCAGATGA ATGTAACCAA GACTCGAG	298

(2) INFORMATION FOR SEQ ID NO:109:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:

```

GAATTCGGCC TTCATGGCCT AACTCTCAA ATATGTGGCC TTAAACGGGA CCAAAGTAGG      60
AAAGCAGATA GTGGAAACT TCTCTCCCA TCAGACCAAG TTCACGGTGC AAAGAACGGA      120
CCCCGTGTCA CGCTACCGCT TTACCCTCAG CGCCAGGACG CAGGTGGGCT CTGGGGAAGC      180
CGTCACAGAG GAGTCACCAG CACCCCGAA TGAAGCTTAC ACCAACAACC AAGCAGACAT      240
CGCCACCCAG GGCTGGTTCA TTGGGCTTAT GTGCGCCATC GCCCTCCTGG TGCTGATCCT      300
GCTCATCGTC TGTTCATCA AGAGGAGTCG CGCGGCAAG TACCCAATAC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:110:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:

```

GAAAAAAGT GGTCAAAGAA TTACGGAAAA TGTTGGGAAA TGAAATCTGT TTATGTATAG      60
TTGGTAATAA AATAGACTTG GAAAAGGAGA GACATGTTTC CATTCAAGAA GCAGAGTCGT      120
ATGCAGAATC TGTGGGAGCA AAACATTATC ATACTTCAGC CAAACAGAAC AAAGGAATTG      180
AGGAACTCTT TCTTGACCTT TGTAAGAGGA TGATAGAAAC AGCACAAGTG GATGAGAGAG      240
CAAAAGGCAA TGGCTCTAGT CAGCCGGGAA CTGCAAGGCG AGGTGTACAG ATTATTGATG      300
ATGAACCTCA AGCCAGACC AGTGGTGGAG GGTGCTGTTT TTCTGGATAA CTGTTACCGC      360
CTAAGAAATT AAAAGACAGA ACAAAGTGT GGATCATTGC CCTCGAG          407

```

(2) INFORMATION FOR SEQ ID NO:111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

```

GAATTCGGCC TTCATGGCCT AAAAGAAAGT ACATTAAAGC AACTTGCATC TCAAAACAAT      60
ACATTTCTCT GGTGAAGTT TTAGTGAAAA TCGATTATTT CCTCCTCTGA GTTTTACCCA      120
ATGGGTAAAG TTGTCTAAAT ATGGGATTCC TAGAATCCA TCCTCCTTCC CAAGCATTTT      180
CCCATGTTTC CTTCACCCC CAAATTCTTA CCCCATTTC GGCAGAGCTG AGCAAAACATA      240
AGCCTTCTCT GAAGTATTGA GGGAAAGTCT GCTAAACGGC TAAACTACTT AAGGAGCTAA      300
CAGAAAAGGT TGTATCAGAG AAACAGTGA GAAACACAGG TTTCTAATTA TATCTGGCAC      360
TGGAGAGAAT GTCAAAGTA TTGGCCAGC TCGAG          395

```

(2) INFORMATION FOR SEQ ID NO:112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

```

GAATTCTAGA AACTACAGTA GTGGGACACA TAACATAGAA GTAATCGTCC AGGATTCTGC      60
TGGAAGAAGT AAGAGTGTTT ACCACATATT TTCTGTTCAA GAGAATAATC ATCTCAGTTT      120
TGATCCCCTG GCATCATTTA TTCTCCGTAC TGATCACTAC ATCATGGCCC GGGTCCTTTT      180
TGTGCTGATT GTGCTGAGCC AGCTCACCAT TCTCATTATT TTTAGATATC GAGGATACCC      240
AGAGCTTAAA GAACCTTCAG GGTTTATAAA TCTGACCTCA TTTTCTCTTC AATGTCTCGA      300
G                                                                              301

```

(2) INFORMATION FOR SEQ ID NO:113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

```

GAATTCGGCC TTCATGGCCT AAGCATGCTG TCTGTGATG GTGATTTTCTG GTGTTTTCTG      60
CATGGGATTA TTAACGGCAT CCATTTTCTT GGGCGTCAAG TTGTTGCAGG TGTCACCATT      120
TGCGATGCAG CAGCAAGAAA AACTCATCCA ACAAGAGAGG GCACTGCTAA ACTTTACAGA      180
ATGGAAGAGA AGCTGTGCCC TTCAGATGAA ATATTGCCAA GCCTTCATGC AAAACTCATT      240
AAGTTCAGCC CATAACAGCA GTCTCGAG                                          268

```

(2) INFORMATION FOR SEQ ID NO:114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

```

GAATTCGGCC TTCATGGCCT ACCCGCATCC CAGCTCTATT TAAAAAATA AAGAAGAAGA      60
TAATTCATT CTTAAGCTG CCCTTACACT ATTAGTCAGG AATGTTTGTG TTCACTTCCA      120
CTACATACCT TACGATCTCT TTTGCTTTGC TTTTTCAG TCAAGTCTCT ATTTATGAGG      180
TGGACAAGCA AGATTGTGCG AAATTTTGCA CTACTGGCAT CGATGGAGCC ATGACAATT      240
GGGATTTCAA GACCCTCGAG                                          260

```

(2) INFORMATION FOR SEQ ID NO:115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

GAATTCGGCC TTCATGGCCT AAACATTTTC TGAAAAACGT GATAGAAAGA AGGAGGAGCT	60
GTTTCTAGGA GGGAAATAAA TAATTTGGCA GGAGACTTTT TGAAGTAGAT ATCTATTGAA	120
TAACAAAGTG ACAATGTTCC CCATCCTCTC ATTTCCATTC CCAATTTTAC TTCTCGTCCC	180
AATTCAAATC ATTCTTACTT ATGATCGGCG CTATGTCAGT GCCTCTCAGC TGGTCTTCCC	240
AGACCCAGTC ACCCTCGAG	259

(2) INFORMATION FOR SEQ ID NO:116:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 238 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:116:

GAATTCGGCC TTCATGGCCT AATTACATTT ATGCAACCAA GCTATCAAAA GGACTGGCTG	60
TCCTTGGGAA TGAAACGTAA CAAAATCGTC AATAGAGTAT TATTGGAAAA GATTGTTTTT	120
AGTCATGAAC TAGCTATTTA AATGAGAAAA CAAATGTAAT GATGCTTTCT GTCATGATTT	180
TATAAATAAA TGTCAATTGT AGGAAATTGG AAAAATAAAT GAAAAAGAAA AACTCGAG	238

(2) INFORMATION FOR SEQ ID NO:117:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 279 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:

GAATTCGGCC AAAGAGGCCT ACCCTAGACC TGTTTTCTGT TCTCTACTCT TGAAATGCTA	60
ATGACCTTCA TGACCAGAGT CCGCTATTGC AGTTTGTGGT TGACAGGCAT CTCTCACTCA	120
CTGTGCTGCA ACTCAACTCT TTATCTTCAA CCAAACAGGG CCTCCCCGCA GCTTTCCAC	180
TGCCACTCAG TGGCACTCCA TCCAGGGTTT CCAAAGTGTA AGACCCCGGA ATTTATCTTT	240
GACACTTCCA TCTCCCTCCA CCCCTCATCC AATTCATCA	279

(2) INFORMATION FOR SEQ ID NO:118:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 656 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:

```

GAATTCGGCC AAAGAGGCCT AGTTATAATG ATGGAAGAAG TGGAAAAACT TTGTGATCGG      60
CTTGAAGTGG CAAGCTTACA GTGCTTGAAT GAAACACTCA CATCATGCAC AAAAGAATAG      120
GAAAGGCTGC TTTGGAAAAA CAGATAGAAG AAATAAATGA GCAAATCAGA AAAGAGAAAG      180
AGGAAGCTGA GGCTCGTATG CGACAAGCAT CTAAGAACAC AGAGAAATCA ACTGGTGGAG      240
GTGGAATGG AAGTAAAAAT TGGTCAGAAG ATGATCTACA ATTACTAATT AAAGCTGTGA      300
ATCTGTCCCC TGCTGGAACA AATTCAAGAT GGGAAAGTTAT TGCTAATTAC ATGAACATAC      360
ATTCTTCCTC TGGAGTCAAA AGAACTGCCA AAGATGTTNT TGGCAAAGCA AAGAGTCTCC      420
AAAAACTTGA CCCTCATCAA ANAGATGACA TAAATATAAA GGCATTTGAT AAGTTCAANA      480
AAGAACATGG AGTGGTACCT CAAGCAGACA ACGCAACGCC TTCAGAACGA TTTGAAGGTC      540
CATATACAGA CTTACCCCT TGGACAACAG AAGAACAGAA GCTTTTGGAA CAAGNTTTGA      600
AAACATACCC AGTAAATACA CCTGAAAGNT GGGAAAANAT AGCAGAAAGT CTCGAG      656

```

(2) INFORMATION FOR SEQ ID NO:119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:

```

GAATTCGGCC AAAGAGGCCT AGAGACAAAT AGGTGATACT GAATTTTATA CTGTTTCTA      60
CTTTTCCATT AAAACATTGG CACCTCAATG ATAAGGAAAT TTAAGGTATA AAATTAAATG      120
TAAAAATTAA TTTCAGCTTC ATTTTCGTATT TCGAANCAAT CTANACTGTT GTGATGAGTG      180
TATGCTTGAA CCTGTAAATC TTAAANANCT TCTTAATCTT CTAGAAGAAA AATCTCCGAA      240
GAGCTCTCTC TAGAAGTCCA AAATGGCTAG CCATTATGCT TCTTTGAAAG GACATGATAA      300
TGGGACCAGG ATGGTTTTTT GGAGTACCAA GCAAGGGGAA TGGAGCACTT TAAGGGCGCC      360
TGTTAGTAAC ATGAATTGGA AATCTGTGTC GAGTACCTCT GATCTAAACG GTAAACCAAG      420
CTGCCTGGAG AGCAGCTGTA CCTAACAAATA CTGTAATGTA CATTAAACATT ACAGCCTCTC      480
AATTTCAGGC AGGTGTAACA GTTCCTTTCC ACCAGATCTC GAG      523

```

(2) INFORMATION FOR SEQ ID NO:120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

```

GAATTCGGCC AAAGAGGCCT AATTTCTTCC TGTGATATGA GAATTTCTTT TCTTTCAGCA      60
GCTTTACCTG CATTTGGCTT TGGCTTTTGC AATCGGCCCC TCATTCTCGA G      111

```

(2) INFORMATION FOR SEQ ID NO:121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:

```

GAATTCGGCC AAAGAGGCCT AACCGCGGCC GCTACTTCGG CCTCTTTGGA AAAAAAAG      60
TGAAAGAAAA NATCACAATA CAGGGAAGAG TGAGCTAAAA ATCCCGGCAT TAAAAAGCCC      120
TTGATGTGGT CCTGAATCGG CTATTTCTAT CTGTTCCCTG AGCCTAACCT CAGCGCTGGC      180
CTCTCTAAAC CTCTTTTCAG TCCTCTCATT TTGAAAACAG GGCCCATTAC ACATTCTCTG      240
AAAGCTTGCT GAGTGATTTA ACCACATAGT CTAGGGGAGG CACTCATCAA ACATAAGGCC      300
TCTCTTTTGG ATTTTATCC TATAGTGGTA TCTATCTAGA GGCTGGTGAA GACAGTGTGG      360
TGGAAGGAAA GTGGGAAGGA TACACTGAAA TAGGACATAG ACGTAGAGGG GAGTCGATGG      420
TCATCTGGCT TGATAGGGAA AGTTAGAGAG CTCTCCTGAA CCACAGTTAC AGAGCTTGGG      480
ATTATAACAC ACACAGCCCC AGAGAAAACA CTTTGTTTAC CATATTTCCT CTTCTGCTGG      540
GGCTCTGGCA CCTTAATTGG TCAAAGGCA GCACTCGAG      579

```

(2) INFORMATION FOR SEQ ID NO:122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

```

GAATTCTAGG AATGGGTCGG GAAGTTGAGA ATCTTATATT AGAAAATACA CAACTGTTGG      60
AAACCAAAAA TGCTTTGAAC ATAGTGAAGA ATGATTGAT AGCAAAAGTG GATGAACTGA      120
CTGTGTAGAA AGATGTGCTG CAAGGGGAAT TGGAGGCTGT GAAGCAAGCC AAAGTGAAG      180
TAGAGGAAAA GAACAGAGAA TTGGAGGAAG AGCTTAGGAA AGCTCGGGCA GAAGCTGAAG      240
ATGCAAGGCA ACTCGAG      257

```

(2) INFORMATION FOR SEQ ID NO:123:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

```

GAATTCCTGT AACTCGGAAA AGATATCAGA GGAATGTTCTG TGGCATCAGA GAGAAAGATG      60
AGAGCTCACC AGGTGCTCAC CTCCTCCTG CTCTTTCTGTG ATCACCTCGG TGGCCTCTGA      120
AAACGCCAGC ACATCCCAGG GCTGTGGGCT GGACCTCCTC CCTCAGTACG TGTCCCTGTG      180
CGACCTGGAC GCCATCTGGG GCATTGTGGT GGAGGCGGTG GCCGGGGCGG GCGCCCTGAT      240
CACACTGCTC CTGATGCTCA TCCTCCTGGT GCGGCTGCCC TTCATCAAGG AGAAGGAGAA      300
GAAGAGCCCT GTGGGCCTCC ACTTTCTGTT CCTCCTGGGG ACCCTGGGCC TCTTTGGGCT      360
GACGTTTGCC TTCATCATCC AGGAGGACGA GACCATCTGC TCTGTCCGCC GGTCACTCGA      420
G      421

```

(2) INFORMATION FOR SEQ ID NO:124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:

```
GAATTCTAGA CCTGCCTCGA GAAAATGAAA GTCTTTTCTC AAAAAACTTC TTCCCAGGTC    60
TGTGAAGCAG CACAGTGGCC CTTTCTGGCT CTCACCTTGT ACCTCGTCCT TGTTCGCTC    120
GAG                                         123
```

(2) INFORMATION FOR SEQ ID NO:125:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 303 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:125:

```
GAATTCGGCC TTCATGGCCT AAGATGGCGT CTCACAAATC ATATGCCAAT TACTGAAATT    60
GGAGGTGAAA ATATTCTAGA TTTATTGTGG GATATATATA TTTTATGGTG TATGGCTCCC    120
AACACCACAT GCCACTGAAC TATATAAAAC TTTATGTCAG AACACTTACT TGTGTCATAT    180
GTAACCTCT TGCAAATAAT ATTCCCTTAC TACAGATCTG TCCCACTGTT CTCAGAAAAT    240
AAACATGGG AACGTTGGAA TGTCTCCTTG CTATAAGATA TTGAATCTA GACCTGCCTC    300
GAG                                         303
```

(2) INFORMATION FOR SEQ ID NO:126:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 508 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:

```
GAATTCGGCC TTCATGGCCT ATGAAGACAA AGCTAACTTA CAAAAGCAGC TGGTTGAAGC    60
AATGAATACG CAATTAGAAC TTTCAGAAC AACTAAATTT CAGAACAAC CTGAAGATAA    120
TGTTAAAAAA CTACAAGAAG AGATTGAGAA AATTAGGCCA GGCTTTGAGG AGCAAATTTT    180
ATATCTGCAA AAGCAATTAG ACGCTACCAC TGATGAAAAG AAGGAAACAG TTAACAACCT    240
CCAAAATATC ATTGAGGCTA ATTCTCAGCA TTACCAAAAA AATATTAATA GTTTGCAGGA    300
AGAGCTTTTA CAGTTGAAAG CTATACACCA AGAAGAGGTG AAAGAGTTGA TGTGCCAGAT    360
TGAAGCATCA GCTAAGGAAC ATGAAGCAGA GATAAATAAG TTGAACGAGC TAAAAGAGAA    420
CTTAGTAAAA CAATGTGAGG CAAGTGAAAA GAACATCCAG AAGAAATATG AATGTGAGTT    480
AGAAAATTTA AGGAAAGCCA CCCTCGAG                                         508
```

(2) INFORMATION FOR SEQ ID NO:127:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 713 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:

```

GAATTCGGCC TTCATGGCCT AGCGGCAGTC CAGATCACGG TTACTGTGAC CTGACTGGAG      60
AAAAATTATG TGTCTGCAAT GATAGTTGGC AAGGTCCTGA TTGTTCTTTG AATGTTCCCT      120
CTACTGAGTC TTACTGGATT CTGCCAAACG TTAACCCCTT CAGTCCTTCT GTAGGTCGGG      180
CTTCACATAA AGCAGTTTAA CACGGGAAAT TTATGTGGGT GATTGGTGGA TATACTTTTA      240
ACTACAGTTC TTTTCAAATG GTCCTAAATT ACAATTTAGA AAGCAGTATA TGGAATGTAG      300
GAACTCCATC AAGGGGACCT CTCCAGAGAT ATGGACACTC TCTTGCTTTA TATCAGGAAA      360
ACATCTTTAT GTATGGAGGC GCCCCAAGGC CCGACCCCTC CCCCAGGGG GCAGTCCCCT      420
TCTTGACAGT CTCAGCTTGC GGGGTGGGGG GAGTCATGCC CAGGGGAGGA GACTTTTTAT      480
CTGGAGGGGA GAGAAGGATT CTAGGGTGTG GGAGTTGGAG AAAGAGGCTT CCTTGAGCCA      540
CCCTTCCAC CCAGCCCTT GNTGGTCCCT AGGCCAAGCC ACCAAGTGAA ACCTTCCAGG      600
ATACTAGCCC GCCAGCTGTG GGCCCCAGAA AGCCAGCCTG CCTTTTAGCA CTGGATACA      660
CACAGACCCA CGGAGCTCTC TGTGTTGGC CTCTCACACA CACACAATC GAG              713

```

(2) INFORMATION FOR SEQ ID NO:128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:128:

```

GAATTCGGCC AAAGAGGCCT AAGAGATTCA GGACCTGCAG AGTCGCCAGA AGCATGAAAT      60
TGAATCTTTG TATACTAAAC TGGGCAAGGT TCCCCCTGCT GTCATTATTC CCCCAGCTGC      120
TCCTCTGTCG GGGAGAAGAA GGAGACCCAC TAAAAGCAAA GGCAGCAAGT CTAGTCGCAG      180
CAGCTCATTG GGCAATAAAA GCCCACAGCT TTCAGGCAAC CTGTCTGGTC AGAGTGGAA      240
TTCAGTCTTA CACCCCAAC AGACCTCCAC AGTCGAG              277

```

(2) INFORMATION FOR SEQ ID NO:129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 670 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:

```

GAATTCGGCC TTCATGGCCT AAGGCTACCG ATATTGGAGA AGCTAACTAT GGGTTTTTACC      60
ACACGTAACA GCTTTTGGT GAAATCAGTT GTTATACTAA TAAGCTTCC TCTAATTGAT      120
TTGAGTTTTG GTTTTGTGT TTGTATTTGC GGGTTTTGTC TCTTTGTTT TCTTGTTTT      180
AGTAAATTGG TTTTCTTCA ATGTATTTTC TTAAAGTAGT CTAGCTTTAC CCAGTTTCCT      240
TGGCAAATTG AAATTAGGC CATGAAGGCC GAATTCGGCC TTCATGGCCT ACTCAGCCTC      300
CCCAAGTAGC TGGGACTACA GCGGTGTGCC ACTATTCTCA GCTGATTTT GTATTTTGTAG      360
TGGAGACGGG TTTTGGCCAT GTTAGTTGGC CAGGATGGTC TCTCTCTCGA CGTCGTGATC      420
CGCCCCCCTC GGCCTCCCAA ATTGCTGTGA TGACAGGCGT GAGCCACCCC GCNTGGCNTG      480
TCCTACCTCT TTTTAAAGAC CTCTCCTGT AAGCACTGGA TAATCTACTT CTAGTAATGT      540
GAAACTGACT ATATNTGAA TTCATATGTT TTCAATCAAC CTGTTGCAGT TTATATTCA      600
CACCTGCTC CCTTTGACA GTTTAAGTAC AGATAGTCTC AGCAGTTCTG GAGACCATGT      660
AAAGCTCGAG              670

```

(2) INFORMATION FOR SEQ ID NO:130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:

```

GAATTCGGCC TTCATGGCCT ACGACTCTGC TCTATTTACC ACTATCAGGC CAATCCTCCT      60
GACATGCTGT TAATATTTAG AAATATTTCT CCAACATTCA GAGTGCCTGG GTACCACACA      120
TGGATGCGAC TAAGATTCTT AAGTCTGGTT TCTAAGAGCT TCTTCAATGT CTCCAACAT      180
CTTTTCAGGC TCATGTTTGA GACCTTCCTT TCAAGAATAA TTTGCTTGTG ATCTGGTTCA      240
AGCTGAACAG AGATTTTCAG ATGACTCCCA AACTATCTGC AACACATCAG CCCTATTAA      300
TCTTCTCAGA ATGCTCATAC AGAAGCCATG CCAGTGCACA AAAGCCAATT CTGACACCTG      360
GCCCTGTCTG ACTCATGGAT TTCTTCCAGG ATTGCTCTTT CTATCTGCTT TAAACCTCCT      420
TGTC AATTGA CTTTCCTTGG CTCCAACCC ACTTTACTCG AG                          462

```

(2) INFORMATION FOR SEQ ID NO:131:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:

```

GAATTCGGCC TTCGTGGCCT ANATATTCTA AGCATTCAAT TTGTCAGTTT CTGAGATTTT      60
CTTTCCATCT TAGTTTTTTA GAAGTCAGAA AATGACTTTT CACATTTCAGT TAGGGTATAT      120
AACAATGTTA ACGTAAGTTT ATGAGCTGAG TAGGTAGTTA ATAAACATCC TTTTAAGTTG      180
TAATGCTTTG AAATAGCATA TTAAAGGGTT GCAAGGGAAA ATTGGAACAT CAGTGTGAGT      240
TATTTTACAG TCATTTGTAG GTCTGTTTGT GACCTTGGCC TTTTCACACT TGTTTGTCTA      300
TCACCTTTAG TATATTACTC TTGGCACAG GTTGTCTAAT CACATTAATT TTGTCATCAA      360
AAATCCCTTG GTTTAGTGAT TCTTAATGAT GTTTATTTTG GAAAGTCATG GACCTGAATT      420
CTTTGAGTAG TTCATGAAAA CCATATACCT TTCCAGAGA AATGGGGTGC ATATAATTTT      480
AGGAAGTTCA AGGTAGGGAA AACAAGCTAA AAATCCCAAC TTATTTTCATC TCGAG          535

```

(2) INFORMATION FOR SEQ ID NO:132:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:132:

```

GAATTCGGCC TTCATGGCCT AAGGGGATCA TCAAAGATGT TGGACACCTT GTGTTCAAAT      60
CTTGGTTTCAG GTGCGGCCTG TGCAGATCGG CTTTGTGGTT TGGTTGTCTT GGCCTGGATA      120
CCAGTGGAGA AGATGTCATC CATATCATCA TCAAATATAG ACTTGGTTTC CACTTCTTT      180
TTGGACTTTT CTTTGTGGTT TACAGTTAAG TCAGCAAAGA TATCAATGTT ATCATCAAAT      240

```

AAATTAGATT CCAATGTTTT CTCCTTCTCT CTGGTTTTCT GAGAGGGTTT AATTGCTTCC	300
GTAGCAAATA TATCATCCTC AAAAATATCT TGTGTTGTTA ATATGACATC CTGCTGACTA	360
CTGGATTTTG TCTCATTCTT CTTGACTTTC TGATCCTCGA G	401

(2) INFORMATION FOR SEQ ID NO:133:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

GAATTCGGCC TTCATGGCCT AGTAGATGAA CTAGAAGATG GATAAACGAA GATAGATAAA	60
ATGAAGAAAA ACAAAAGTCA AGGAGAACTC AGGCGTCCAA GAGTGTGTAA ACAACTTCTG	120
GTGTGAGACG CGCTACATTG CGCTAAATGG CCTGTGCGCT TCTGGTTTTT CCCTTCCTCT	180
GTTGATTTTT TATAGTTGTC TTTTATTTTA AACACGCCTC CCCCCCCCCT TTTTAACTG	240
ATTTTACCAT CACTCTCTCT AGCCCTGCCT CCCTAGAATT AGCTGCTTCT TACCTCCCTT	300
GGATCTGGAA CTTAAATATT AACGTGTATA TAAGTTAATA GTAAGTAGAC CGTGAATTTA	360
GAAGAGTAAA ACAGAATCAT GAGTACGTAG TCACTGTGGC CCCTTTTTTG CTGGATTCA	420
AGTTTCGTAAG CATTTTTGGA AGAGAGTCGA AGGGGAAGGG GTGGCTTGCC AGTCAGTTGA	480
GTGATGCATG GCTCGAG	497

(2) INFORMATION FOR SEQ ID NO:134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

GAATTCGGCC TTCATGGCCT AGGCTGGTCA TTGAGAGTGT TGGTGAGTC AACTGGAAC	60
ACGATGTGAT TGGTAAACAT GTGCTTGATA CATCGAACAA AATATTCTGT CTCTGCTTCT	120
GTAAGTTGAA CAGGCTCAGA AGACTTGAAC AAGGGTCCTA TATTCAGAAA CTCAGGAATG	180
GCAGCCAAAT GTTCTTGGGG ATATATTCTT AATGAAGTGC TAGACTATCC AATTACTTAA	240
TTTCTTATAC CTTTAGATAA TCAGTATGAA AAGTTCCCAT TTATAATGGA AATGAAAATT	300
CTTAACTAAA CTATACATGT AATATGTATT TCTAGAAGAG AATAAAAACC CAAGTCCTCG	360
AG	362

(2) INFORMATION FOR SEQ ID NO:135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:

GAATTCGGCC TTCATGGCCT ACCCAATCA ATGGATCCTC AACTCCAAAT CCAAAGATAG	60
--	----

CACTCTCTGT	CACTGCTGGA	GTTGCCAGTT	CACTCTCAGA	AAAAATAGCC	GACAGCATTG	120
GAAATAACCG	GCAAAATGCA	CCATTGACTT	CCATTCAAAT	TCGTTTTATT	CAGAACATGA	180
TACAGGAAAC	GTTGGATGAC	TTTAGAGAAG	CATGCCATAG	GGACATTGTG	AATTTGCAAG	240
TGGAGATGAT	TAAACAGTTT	CATATGCAAC	TGAATGAAAT	GCATTCTTTG	CTGGAAAGAT	300
ACTCAGTGAA	TGAAGGTTTA	GTGGCTGAAA	TTGAAAGACT	ACGAGAAGAA	AACAAAAGAT	360
TATGGGCCCA	CCTCGAG					377

(2) INFORMATION FOR SEQ ID NO:136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:

GAATTCGGCC	TTCATGGCCT	AAGCAAACCT	CATGCAGCTG	GTGGAAGTAG	ATGTGTCTCG	60
AAATGAGATT	CCTGAAATTC	CAGAAAGCAT	TTCACTCTGT	AAAGCACTGC	AGGTAGCTGA	120
CTTCAGCGGA	AACCCACTGA	CTAGGTTGCC	AGAAAGCTTT	CCTGAATTAC	AGAATTTAAC	180
ATGTCTTTCT	GTAAATGACA	TCTCACTACA	GTCTCTACCT	GAAAATATTG	GCAATCTTTA	240
TAACCTGGCT	TCACTGGAAC	TGAGAGAGAA	TCTTCTTACA	TATCTTCCTG	ACTCTCTTAC	300
CCAGCTGCGA	AGACTAGAAG	AACTTGACTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:137:

GAATTCGGCC	AATGAAGCCT	ACTTTAGTAT	TTTGCACTT	CCTAATTGAC	ACCTTGGGAG	60
ACTGCAGGAA	GGGAACGAGA	ATCATTNNTA	GGNTATTTGT	GTGTGTGTGT	GGTTTTTTTT	120
TTTTTTTGGG	AGACAGAGTC	TCACACTTTT	GCCCAGGCTG	GAGTGCACTG	GCGTGATCTC	180
GGCTCACTGC	AACCTCTGCC	TCCAGGGTTC	AAGCGATTCT	CTTGCTCAG	CTTCCCGAGT	240
AGCTGGGATT	ACAGGCACAC	GCCACAACGC	CTGGCTAATT	TTTATATTTT	TAGTAGAGAC	300
AGTCTCGAG						309

(2) INFORMATION FOR SEQ ID NO:138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 599 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:

GAATTCGGCC	AAAGAGGCCT	AAACTCAGAA	TGGTGCTACT	TGAAGACTCT	GGATCTGCTG	60
ACTTCAGAAG	ACATTTTGTC	AACCTGAGTC	CCTTCACCAT	TACTGTGGTC	TTACTTCTCA	120

```

GTGCCTGTTT TGTCAACAGT TCTCTGGAG GAACAGACAA GGAGCTGAGG CTAGTGGATG      180
GTGAAAACAA GTGTAGCGGG AGAGTGGAAG TGAAAGTCCA GGAGGAGTGG GGAACGGTGT      240
GTAATAATGG CTGGAGCATG GAAGCGGTCT CTGTGATTTG TAACCAGCTG GGATGTCCAA      300
CTGCTATCAA AGCCCCTGGA TGGGCTAATT CCAGTGCAGG TTCTGGACGC ATTTGGATGG      360
ATCATGTTTC TTGTCGTGGG AATGAGTCAG CTCTTTGGGA TTGCAAACAT GATGGATGGG      420
GAAAGCATTG TTGCAATCAC AATGAAGATG CTGGCGTGAC ATGTTCTGAT GGATCAGATC      480
TGGAGCTAAG ACTTAGAGGT GGAGGCAGCC GCTGTGCTGG GACAGTTGAG GTGGAGATTC      540
AGAGACTGTT AGGGAAGGTG TGTGACAGAG GCTGGGGACT GAAAGAAGCT GAACTCGAG      599

```

(2) INFORMATION FOR SEQ ID NO:139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 541 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:

```

GAATTGGGCC TTCATGGCCT AACCTTCCTG AATATCTGCC GTTGTCTCTG CAAGAAATAA      60
CTAGTCAACC CAAAAGGCAG TATCTTTTAC TTCATTCTTT GAAGGAAATT ATTAGCTCTG      120
CATCAGTGGT GGGCCTTAAA CCATATGTTG AAAACATCTG GGCCTTATTA CTAAAGCACT      180
GTGAGTGTGC AGAGGAAGGA ACCAGAAATG TTGTTGCTGA ATGTCTAGGA AAACCTCACTC      240
TAATTGATCC AGAACTCTC CTTCCACGGC TTAAGGGGTA CTTGATATCA GGCTCATCAT      300
ATGCCCGAAG CTCAGTGGTT ACGGCTGTGA AATTTACAAT TTCTGACCAT CCACAACCTA      360
TTGATCCACT GTTAAAGAAC TGCATAGGTG ATTTCTTAAA AACTTTGGAA GACCCAGATT      420
TGAATGTGAG AAGAGTAGCC TTGGTCACAT TTAATTCAGC AGCACATAAC AAGCCATCAT      480
TAATAAGGGA TCTATTGGAT ACTGTTCTTC CACATCTTTA CAATGAAACA AAAGTCTCGA      540
G                                                                                   541

```

(2) INFORMATION FOR SEQ ID NO:140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:

```

CTTCATGGCC TAGTGGTTCT TCTGAAATCG GCCTTCAGAC ACCTGTCTTT GGTAGTACCA      60
ATATCTAAGA AGTGGTTTCA GTTCAATTTT GTTTTCCTCC ATGCCAGAGA GAAGCCACAG      120
TTTCCTAAGC TGGGGAGGAG GTATATCCTT CAAGAGATCG GCTTGTTAGA ATAGACCACT      180
TAACACCATA TGAAAAGCA ACAGACTGAA ACATGGATGT CCTCAAGAAG GGCTGCTGAC      240
ACCTATGATT TGGCAAGGAG ATAAATAACA GAATGTGCAA AGGGTCATAA GAGTGCAGAC      300
ACCCTAATGT CTGTTGGCTG GAAGGTCAGA GCAGTTCACC AGTGAAAATG GGTACGCCAT      360
GAAGGCCGGC CTTCATGGCC TATAGGCCAT GAAGGCCGAA TTC                               403

```

(2) INFORMATION FOR SEQ ID NO:141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:141:

GAATTCGGCC	TTCATGGCCT	AGTCCTCATC	TGCTGGCATT	TTGTGGGGTG	TTAGTGCCAA	60
ACTTGAATAG	GGGCTGGGGT	GCTGTCTTCC	ACTGACACCC	AAATCCAGAA	TCCCTGGTCT	120
TGAGTCCCCA	GAAC TTGCC	TCTTGACTGT	CCCTTCTCTT	CCTACCTCCA	TCCATGGAAA	180
ATTAGTTATT	TTCTGATCCT	TTCCCCTGCC	TGGTCTAGCT	CCTCTCCAAA	CAGCCATGCC	240
CTCCAAATGC	TAGAGACCTG	GGCCCTGAAC	CCTGTAGACA	GATGCCCTCA	GAATTGGGGC	300
ATGGGAGGGG	GGCTGGGGGA	CCCCATGATT	CAGCCACGGA	CTCCAATGCC	CAGCTCCTCT	360
CCCCAAAACA	ATCCCGACAA	TCCCTTATCC	CTACCCCAAC	CCTTTGCGGC	TCTGTACACA	420
TTTTTAAACC	TGGCTCGAG					439

(2) INFORMATION FOR SEQ ID NO:142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:

GCGATTGAAT	TCTAGACCTG	TGTGTCTAGC	TGTGATGGAA	TCTGAAATGA	AGTTTGACAA	60
GGACCATGAT	GGACTCATTG	AAAATGGAGG	CTATGCAGAC	CAGACCTATG	ATGGATGGGT	120
GACCACAGGC	CCCAGTGCTT	ACTGTGGAGG	GCTGTGGCTG	GCAGCTGTGG	CTGTGATGGT	180
CCAGATGGCT	GCTCTGTGTG	GGGCACAGGA	CATCCAGGAT	AAGTTTTTCT	CTATCCTCAG	240
CCGGGGCCAA	GAAGCCTATG	AGAGACTGCT	GTGGAATGGC	CGCTTACTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:

GAATTCGGCC	TTCATGGCCT	AGGGAGGCTG	AGGTGGGAGG	CTCACTGGAG	GCCAGGAGTT	60
CGGAACCAGC	CTGAGCAACA	TAGGGAGACC	TCAGCTCTAC	AACTGAAAAA	AAGATAGCCA	120
GGTGTGTTCA	TGGTGGCACC	TGTCTGTATT	CCAGCCGCTT	GGGAGGCTGA	GGCAGGAGGT	180
TTGCTTGAGT	CCAGGAGTTT	GAGGTTGCGG	TGAGCTACAC	AATGAGCTAT	GGTGGCACTA	240
CTACACTCCA	GCCTGGGCCA	TAGAGTAAGG	CCCTGTCTCT	AACTGGAAGT	CCAAAGAGGG	300
ATCTACTTCC	TAGACTATTA	ATTTAATAGA	TCAATAAATT	AATCAAGAAT	ATGATTTTTT	360
TCTCATCTTT	CTCTGTAGTC	ATATTTTATA	CAGACTTTTT	GTTTAAGTAA	TCTCTCTTTA	420
TGGGCAGACA	ATGATTTTCA	AAACACCCTG	CCTCGAG			457

(2) INFORMATION FOR SEQ ID NO:144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:144:

```
GAATTCGGCC TTCATGGCCT AGTCAGCCGT GACTGCACCA CCATACTCCA GCCTGGGTGA      60
CAGAGCGAGA TCTGTCTTA AAACAAAACA AAACAAAACC CAGACTTCCT ATAATTCCTA      120
AAAATAAATG TGGGTTTGAG AGGCCTACCT TGAAATGTAC AAGATCCTGG CCAGACTTCA      180
CCTATCTAAC AATATGCTAG TAACTATTG TTAGCATGTC TTAAAGAAAT GTTCATCAGG      240
GCCTCAGAAA GCAAGGCAGA GAACAGGTCC CTGAAATTTA CTAGCTTGCA CCAAACCATC      300
AGATAAAGAT AGGTTAATAT TTGACAGAAA AAACCTCTCA AAAAGAGACA GTGAAATACT      360
CTTGAGATGA ATCCAGGCGG CTCTCGAG      388
```

(2) INFORMATION FOR SEQ ID NO:145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:

```
GAATTCGGCC TTCATGGCCT AGGCAGTGGA GGCCTCTGTA ATTCTAGCAT ACAGGTGGCA      60
AGTTATTACA TTATTCTTT CCTCCTGTCT ACCTGCAGTT GGTTTTATGT GGGGCGTTAG      120
TACACTTCCC AAAGGGCTTG CCCGCAGGTG AGAGGTGCAC ATTGAACTCC CTCACCAGGC      180
AGATGGGAAG TGTGGCCATG AGAGAGAGCT TCAGGGGCCC TGGGTTTATG ACATCGCTGG      240
GCCAGGAATG AGGTTAATAT TTTTAATGGC GAAGGGTGAG CCCCATTATT ACCCGAGCTC      300
GAG      303
```

(2) INFORMATION FOR SEQ ID NO:146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:

```
GAATTCGGCC TTCATGGCCT ACTGGATGGC ATCTACTTCG TATGACTATT GCAGAGTGCC      60
CATGGAAGAC GGGGATAAGC GCTGTAAGCT TCTGCTGGGG ATAGGAATTC TGGTGCTCCT      120
GATCATCGTG ATTCTGGGGG TGCCCTTGAT TATCTTCACC ATCAAGGCCA ACAGCGAGGC      180
CTGCCGGGAC GGCCTTCGGG CAGTGATGGA GTGTCGCAAT GTCACCCATC TCCTGCAACA      240
AGAGCTGACC GAGGCCCAGA AGGGCTTTCA GGATGTGGAG GCCCAGGCCG CCACCTGCAA      300
CCACACTGTG ATGGCCCTAA TGGCTTCCTT GGATGCAGAG AAGGCCCAAG GACAAAAGAA      360
AGTGGAACAA CTCGAG      376
```

(2) INFORMATION FOR SEQ ID NO:147:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:

```

GAATTCGGCC TTCATGGCCT AATGGAAAGG ACAAGGAAAA GGGAGAAGGG GTGAGAGTCT      60
GTCCTAGGGG CCAACGAGAA CAGTGAGCTG TTTCAGGGGA GCCATTTCCT TGTCATGCT      120
CACAAAGCCTG TGGATTCTTC CCCCTCTGCA GGAAATTACC TGATGTTCCA AACCCCCTCC      180
AGATCCTGTA TATCCGCAGC ATCTCCCTT TCCCTGAGCT GGAACAGTTT CTACAGGACA      240
CTATCAAGAG GTACTAGGGG CCTGGAGGTT TGGGCTCCAA GAGAAGCTTG ACAGAGCCCA      300
CGCCCGACCC CTACTTCTGT TTCTTCCTAA GGTATAATCT GCAGATGTTG GAAGCTGAGG      360
GCAGCATGAA GCAGGCCCTG GGTGAATGTC AGGCACAGCA GCCCCCTCG AG      412

```

(2) INFORMATION FOR SEQ ID NO:148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:148:

```

GCCTGGCCAT CCGGAGAGCT AAGAACCTCA GGCGGCTGCT GTACGTNTCA TGCAACCCCC      60
GGGCAGCCAT GGGCAACTTT GTGGACCTCT GCAGAGCCCC ATCTAACCGG GTGAAGGGCA      120
TTCCCTTCCG GCCGGTCAAG GCTGTGGCAG TGGACCTGTT CCCGCAGACC CCTTCTTTT      180
TCATACTTAT ATGAAAGACT ACATACTTAA AATACTGGTG ATTATATTTA GGACCTGAAA      240
TCATAAGATT GTGGTCTGTC TTTTACTTA TTTTGTATC TTAGCGATGT CTAGAGTTAA      300
TAAGTGTGTC TTTTCTAATC ACAGCAAATC TCGAG      335

```

(2) INFORMATION FOR SEQ ID NO:149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:149:

```

GGATTCGGCC TTCATGGCCT AGTGGGGCAC TAGGATCATC ATTTGGGTGA GAGCCCTCGG      60
CAATGGTGA GAGGGAGAAG TTATCATTGT GGAGCTCAGA TGGGGTCCGG AATTGTGTTG      120
TCCTACGCAG CTTGGTATTC TCCGTCTTGA GCAGGTAGAG CTTCTTGGA AAGAACACCG      180
TCATCATGAA GAGCAGGAGC AGGACGAGGG CAGCCGAGCC CACGGCCACG CACATCACCT      240
GGAAGTCGGT GATGATGGAC TCGCAGCGCA TCCCCTTGTG CCAGATGTAG TCCTGCGTGT      300
TGACCTGCA GAAGGCCCT ATGTTCTCCA CCAGGTAGCA CTGGCCGCCA TTGTGACAGT      360
AACTTGGGAA GAGGTCGCAC ACTGACCGGC AGGAGCCGTT ATGCCGCACA AAGCCACTGC      420
GGCACTCAGT GCCATTTTCA CTGGAGGCCA AGTCCCTGCC TGGCTCTCCT TAGGCCATGA      480
AG      482

```

(2) INFORMATION FOR SEQ ID NO:150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:150:

```

G TTCCTTACT AACTTTAATG GCCACAACAT TTAGGCGAAA GGGGGGCAAT CATTGGTGGT      60
T TTGGCATTCG CAGAGACTTC TGTCAGTTTC TGCTTGAAAT TTTCCCATTT TTAAGAGAAT      120
A TTGGGAACAT TTCATATGAT TCCTCATCAG AAGATAGTGA AGATGCTGAA GAAACATCAG      180
T TTCCAGAAGC TCCGAAAATT GCTCCAATAT TTGGAAGAGG GGCCAGAGTA GTTATAACCC      240
A GAGCCCTGG GAAATACGTT CCCCCCTCT CCTCGAG                                277

```

(2) INFORMATION FOR SEQ ID NO:151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:151:

```

G CTCGCCCCAC TTTATGAAGA GCGATTTTAC GGCTGCTTGA ACCATTGCGA TTTGGATTTG      60
T GTTCAGCAC TTTAAAAGGT TCAACTTTTT GCTTCTACCC AGATTGGTCT CAGGTCTGTC      120
T TTCTCCAGAT GACCGGTGGT TTCCTGAGCT GCATCTTGGG CTTGGTGCTG CCCCTGGCCT      180
A TTGGCTTCCA GCCTGACCTG GTGCTGGTGG CGCTGGGGCC TGGCCATGGC CTGCAGGGCC      240
C CCCACGCTGC ACTCCTGGCT ACAATACTCG AG                                272

```

(2) INFORMATION FOR SEQ ID NO:152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:

```

G AATTGCGCC TTCATGGCCT AGGGGCGGTG AAACGTCCTG AAGAGCGTCC AGCTCGTGGC      60
C GAGAGGACT CGGGCGCTCC CCACGCTGGA GGCCGTGGAC CGCTCCCTTT AAAAGTTGAA      120
A CGGCCGCGG TTCGGGACGG CCTGGCGGGA GGAGGGCCCG ACGAGGGGAG GCTTCAGGGA      180
C AACTGGGGC TTCTCGACGT CCACCCTTTT CAGGGCGCGG CCCCAGTAGC CCTCGGGCCG      240
G CCCAGGTAC AGGAGGTGCT TCCCGGGACC CCCGAGTAC CTGGAGGGAC CTCCCAGGGG      300
A GACTCGAG                                308

```

(2) INFORMATION FOR SEQ ID NO:153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

```

GAATTCGGCC TTCATGGCCT ACAATCCCAA ATGTAGGATC ATGCCCATTG CCCTAAGCCC      60
AGGCATGAGA GTCGACATCT CTCCTCTTAT ATACAGATCC AGTCCACAGG TGAAGTGGGA      120
ACTCTCCAAC CAGGATTGAG CACACCATTG ATGTTGCGAC TCCTCTACTG GAACACAGCT      180
TGGAGAAGGG ATTGGGGCTC TCATGGCAGG ATGCAATCCA CTGTTGAGAT TGTGACTCAT      240
GCACTTGAAC CTAAGTCTCA GGAGTTGTTG ACTCTTACAC CCAGCACCCA GGTGATAGGA      300
CTCTCATGTC TGGTTCCTGC CCACAGGTGA AATGTGTGACA TATACATGGT CACAGCTCAC      360
AGGTGAGGTG ATAACCTACA TACCTGGATC CAGCTAAGAG AACAGATTTT GACTCTGATA      420
TCTTAGGCCA TGAAGGCC

```

(2) INFORMATION FOR SEQ ID NO:154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

```

GAATTCGGCT TCATGGCCTA CAAGATGACT AAAGTCTTCA CTCACCAAGG AAAAGTGGCT      60
CTGTATGGCA AGCTGGTGCA GTCAGCTCAG AATGAGAGGG AGAAACTTCA AATAAGATA      120
GATGAGATGG ATAAATACT TAAGAAGATC GATAACTGCC TCACTGAGAT GGAACAGAA      180
ACTAAGAATT TGGAGGATGA AGAGAAAAAC AATCCTGTGG AAGAATGGGA TTCTGAAATG      240
AGAGCTGCAG AAAAAGAATT GGAACAGCTG AAAACTGAAG AGGAGGATGC TCTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:155:

```

GAATTCGGCC TTCATGGCCT AAATTAGGA AGGTCAAACG TGAATCTCCA TTTGACAAAC      60
GTCCAACTGC AGCAGAGATT AAAGTGGAAC CCACCACTGA GTCATTGGAC AAAGAGGGCA      120
AAGGTGAAAT TAGAAGCCTA GTGGAGCCAC TCAGTATGAT CCAATTTGAT GATACTGCTG      180
AGCCACAGAA AGGAAAAATA AAAGGAAAGA AACACCATAT CTCTTCAGGA ACTATCACAA      240
GCAAGAAGA AAAAAGTGA GAGAAGGAAG AGTTGACCAN ACAAGTCAAG TCTCATCAAC      300
TTGTTAAATC ACTCTCAAGA GTGGCTAAAG AGACTTCAGA ATCTACCAGA GTTCTAGAAA      360
GTCCAGATGG CAAAAGTGAA CAGCGTAACC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:156:

GAATTCGGCC	TTCATGGCCT	ACAGAGTACT	GAGTGGAAAC	TACGATGATA	GATTACAAA	60
TAATGTAGCA	TACTTCTACT	TCATTGTATC	TTAAGTTTCT	TGAAATATTG	CTACTGGAGA	120
TTGGAAAGAA	ATCTTAATGT	TATGGGGTAT	TGTCTAAGAA	GCTTTATTTT	AAAACCATCT	180
CATTAAATTT	TGTTGCATTT	TAGATAATCG	TCCCCAGATG	CCATGTTACC	CTAGTGCAGA	240
GTTTGGGGCT	GGATAAGTTT	TTGTTGTAGG	TGGCTATCCT	GTGTTTTGTA	GGGTATTTAG	300
CAGCATCCTG	GCCTTAAAC	AAAAATGTTT	TCAGACATG	CCAAATGTCC	CCCGAGCGGT	360
AAAGTCACCC	CCAAGTTGAG	AACCGCTCTA	TACAAAGAGC	TGTTATTAGA	GCCAGACTCG	420
AG						422

(2) INFORMATION FOR SEQ ID NO:157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:157:

GAATTCGGCC	TTCATGGCCT	AGATTGCTTG	AGGCCAGAAG	TTCAAGACAG	GCTGCCCAAC	60
ATAGTGAGAC	CCCCTTCTCT	ACCAAAATTT	TAAAAATGAG	CATGCATCTG	TAGTCCTAGC	120
TATTGGGAAG	GCTGAGGCAG	GAGGATCATC	TGAGCCCAGG	AGTTTGAGGC	TGCAGTGAGC	180
TAAGAAGGTG	CCACTGCACT	GCTGTTGTCT	CTCAGCAGAT	CATTTTCAGC	TTTCTTTGGA	240
GAGTAGCCAT	TAGCAATGCA	AATGTGAAGT	TTGATAGCAC	AATAAATAAA	AACTGAAAA	300
CTGTAGATGT	TACTTATAAA	AACTGGGCAC	TCAGATAAAT	TGGGTTTGGT	CAAGAAGACA	360
GTGAAGCATA	TCCCTGTTGG	GCCAGAGGCT	GTTATCGTTT	TGCTCTGAAT	TCAAACCTG	420
ATATGTCTCC	AAATTTGCTT	AGGGTTGTTA	TCCTGAAAA	TAGAATCTGA	TAGAAGGTGG	480
GCACATCTCG	AG					492

(2) INFORMATION FOR SEQ ID NO:158:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:158:

GAATTCGGCC	TTCATGGCCT	ACTGCTTTCG	TGAAGACAAG	ATGAAGTTCA	CAATTGTCTT	60
TGCTGGACTT	CTTGGAGTCT	TTCTAGCTCC	TGCCCTAGCT	AACTATAATA	TCAACGTCAA	120
TGATGACAAC	AACAATGCTG	GAAGTGGGCA	GCAGTCAGTG	AGTGTCAACA	ATGAACACAA	180
TGTGGCCAAT	GTTGACAATA	ACAACGGATG	GGACTCCTGG	AATTCATCT	GGGATTATGG	240
AAATGGCTTT	GCTGCAACCA	GACTCTTTCA	AAAGAAGACA	TGCATTGTGC	ACAAAATGAA	300
CAAGGAAGTC	ATGCCCTCCA	TTCAATCCCT	TGATGCACTG	GTCAAGGAAA	AGAAGCTTCA	360
GGGTAAGGGA	CCAGGAGGAC	CACCTCCCAA	GGGCCTGATG	TACTCAGTCA	ACCCAAACAA	420
AGTCGATGAC	CTGAGCAAGT	TCGGAAAAAA	CATTGCAAAC	ATGTGTCGTG	GGATTCCAAC	480
ATACATGGCT	CAGGAGATGC	TCGAG				505

(2) INFORMATION FOR SEQ ID NO:159:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

GAATTCGGCC	AAAGAGGCCT	AGCCGGAGCA	GCTGTCTGGG	AGTCAAGGCT	GCAGTAGCGT	60
TTCTTCATGG	GGTGCTCCAG	GGGGTGCCAC	AGACCGACAG	GCAGCCCAAG	GGCCTGGGAC	120
CCCTCCCCA	GGCAGGTGCT	GCCCCAGGAG	GACTGTCCTC	GGGAATGAAC	CTCCCGCGGG	180
CTTTGGACTG	AGGTCCCTGT	GGCCTCGGTC	TCCTCCCAT	GAAGTGGGAG	CGAGGCTCCC	240
CAATGGTGCT	TTTGGCTTTA	GTGTACGATG	TTTGCTGTGC	TTCCCGCCGT	GGAGGGCAGA	300
GCCACCCAC	ATCAGGATCG	GACGTGTAC	CCCTCCCGGT	CCCGGCCCTG	GCCCAGCCAG	360
CCCAGCCCTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:160:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 362 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:160:

GAATTCGGCA	AAGAGGCCTA	ATGAATTCTC	TGATCACAAA	ACAGACCCAG	GAAAGCATTC	60
AGCATTTTGA	GCGACAGGCA	GGGCTGAGAG	ATGCTGGCTA	CACACCCAC	AAGGGCCTCA	120
CCACCGAGGA	GACCAAGTAC	CTTCGAGTGG	CCGAAGCACT	CCACAACTA	AAGTTACAGA	180
GTGGAGAGGT	AACAAAAGAA	GAGAGGCAGC	CTGCATCAGC	CCAGTCCACC	CCAAGCACCA	240
CTCCGCACTC	TTACCTAAG	CAGAGGCCCA	GGGGCTGGTT	CACTTCTGGT	TCTTCCACAG	300
CCTTACCTGG	CCCAAATCCT	AGCACCATGG	ACTCTGGAAG	TGGGGATAAG	GACGGGCTCG	360
AG						362

(2) INFORMATION FOR SEQ ID NO:161:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 419 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:161:

GAATTCGGCC	AAAGAGGCCT	AGTTTTACAA	AACGCGATTT	GTAATATAAA	CTAGTTAGAT	60
AACTCAGAGG	GTTTTATTGG	CCATATTTTT	GTTTATGCTT	TGTCACAGGC	TTTAGTCATT	120
GCTTCCATGT	GTTTTCATCC	TTCAAGATAT	CTTCAAGAAG	CCTACTTATG	GACCAAACAA	180
GTTCTGACCA	TCATGGAGAA	ATCTCTGGTC	TTGCTCAGGG	AGGTGACGGA	TGGCTCCCTC	240
TATGAAGGAG	TTGCGTATGG	CAGCTACACC	ACTAGATCAC	TCTTCCAATA	CATGTTTCTC	300
GTCCAGAGGC	ACTTCAACAT	CAACCACTTT	GGCCATCCGT	GGCTTAAACA	ACACTTTGCA	360
TTTATGTATA	GAACCATCCT	GCCAGGTATA	GTGAGGAGTC	AGAAGTGTGA	AAACTCGAG	419

(2) INFORMATION FOR SEQ ID NO:162:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:162:

```
GAATTCGGCC AAAGAGGCCT ACAGGTAGTA TCTTTATAGC GGTATAAAAA CAGACTAATA    60
CAAACAGGTA GCTCTAAATT GTGAGTTTTT CTTAATCCTT TTGATCTTCT GTGATAGCGA    120
TTTTTCACAT TTCACACTTC CCTAATGCCA AAAATCCACC TCCAGCAGCT GTTTTGCCTC    180
TTTCTTATCC TGCCCCTTGG AAGAATGTCA TCATTATTGC TGCCACAGCA CTGTGTTCTT    240
TTTCAGAAGT TACAGCTCGA G                                     261
```

(2) INFORMATION FOR SEQ ID NO:163:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 108 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:163:

```
GAATTCGGCC AAAGAGGCCT AGTGGTCTGG GGCAAAATTT AGTAAGACCT GGAAAGCATA    60
GGTAATCAAA GCAGAACTG ACAAATGAGA TGGTATCAAG CTAAAAAG                    108
```

(2) INFORMATION FOR SEQ ID NO:164:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 292 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:164:

```
GAATTCGGCC AAAGAGGCCT AGTTTAACTT CATCAGACAT TATTGCAGCC AGCTGTCAGC    60
CAAGCTCAGT AACCTTCCAA CGCTCATTTT CATGAGGCTA GAGTTCC1GA GAATCCTCTG    120
TAGCCATGAG CATTACCTCA ATCTGAACCT TTTTTTTATG AATGCTGATA CTGCTCCAAC    180
ATCTCCTTGT CCTTCCATAT CTTCCAGAA CTCAAGCTCC TGCTCCAGCT TCCAGGACCA    240
GAAGATCGCC AGCATGTTTG ATCTGACTTC CGAGTACCGC CAGCCCCTCG AG              292
```

(2) INFORMATION FOR SEQ ID NO:165:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 135 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:165:

GAATTCGGCC AAAGAGGCCT AGCAAAACT GTTCAAAAGA GTTGTGATT ACTTTCATT	60
CCACTTTCTC ACCCCCATTC TCCCCTCAAT TAACTCTCT TCATCCCCAT GATGCCATTA	120
TGTGGATTCC TCGAG	135

(2) INFORMATION FOR SEQ ID NO:166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:166:

GAATTCGGCC AAAGAGGCCT AGAAAAAGTA GCACAGTGGA GTCTGAAATA GCAAGCGAAG	60
AGAAAAGCAG AGCTGCTGAG AGGAAAAGGA TTATTATTAA GATGGAGCCA GAAGATATTC	120
CTACAGATGA ACTGAAAGAC TTTAACATTA TTAAAGTTAC TGATAAAGAC TGTAAATGAAT	180
CCACTGACAA TGATGAATTA GAAGATGAAC CTGAAGAGCC ATTTTATAGA TACTATGTTG	240
AAGAAGATGT CAGCATAAAA AAAAGTGGTA GGAAAACTCT AAAACCTCGA ATGTCAGTAA	300
GTGCTGATGA AAGAGGTGGT TTAGAGAATA TGAGGCCCC TAACAACAGC AGTCCAGTAC	360
AAGAGGATGC TGAATATGCA TCTGTGAGC TGTGTGGACT TACAATAACC GAGGAGGACC	420
TGTCATCTCA TTACTTAGCC AAACCTCGAG	449

(2) INFORMATION FOR SEQ ID NO:167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:167:

GAATTCGGCC AAAGAGGCCT AAAAGGAAAC TTGGACAAGT AGAAAGTGA TGACCCAGGC	60
TCCGTTACAT ATACTTGGAT TCCAGCTGGG ACCTAGATT GCTGAGGACG GAAGCCAAGG	120
AGACAGGAAC ATGTGGCTGC TCCCAGCTCT ACTCCTTCTC TGCCTCTCAG GCTGTTTGTC	180
TCTGAACGGC CCCGGCTCTG TGAAGTGCAC TGCGGGGGAC TCTCTGACAG TGTGGTGTC	240
GTATGAGAGC ATGTACAAGG GATATAACAA GTACTGGTGC CGAGGACAGT ACGACACGTC	300
ATGTGAGAGC ATTGTGGAGA CCAAGGGAGA AGAGAAGGTG GAGAGGAATG GCCGCGTGTC	360
CATCAGAGAC CACCCGGAGG CTCTCGCCTT CACTGTGACC ATGCAGAACC TCAATGAAGA	420
TGATGCTGGA TCTTACTGGT GCAAAATTCA GACAGTGTGG GTCCTGGATT CATGGTCACG	480
CGATCCCTCG GACCTGGTTA GGGTGTATGT TTCCCAGCA ATTACAACCC CAAGGAGGAC	540
CACACATCCA GCCACCCCGC TCGAG	565

(2) INFORMATION FOR SEQ ID NO:168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:168:


```

GAATTCGGCC AAAGAGGCCT AGTTTCCTTT ATATGTTTGC ACTTAATTTG ATTCCATCCT    60
TCATGCTGTT TTCATTATTC TTAGTTCATC TACACCACAT AAATTATCAC CTTTGTGTTTC    120
AGTTCCCCAA TTTCCATGTG CCACAAACAA ATCTCGAG                                158

```

(2) INFORMATION FOR SEQ ID NO:169:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 383 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:169:

```

GAATTCGGCC AAAGAGGCCT AGTCTCACCA TCTATTCTAA ACCTTATATT ATCAATCCTA    60
TTCCCTCTCA CCAAAGAAT CCCTTTATAC AAGTAATTAT CCTGTCTATG TCTTTCAACT    120
CTAGTTTCCC CACTGCAACT CTTCCTTAA TATATGTACC TGCTCTGTTA TCCCTCTCCA    180
GCTACTTCCC TATTTTCTGT TCCCTTTAC AGGAAAACCT TTCTCCAGCA TTTCCCAATG    240
CCATGTCTTT ACTTCCTCAC ATTCTATTTT CTTCTCAAAC CATTTTTATT AGGCTTCTTT    300
CCCCAATGGC TATTGTCAAG CTTCACTTAA TGCCGTGCAA ATCACCTAT TCTCCAGGTC    360
TTCTTCTTC CCAGTCTCTC GAG                                              383

```

(2) INFORMATION FOR SEQ ID NO:170:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 282 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:170:

```

GAATTCGGCC AAAGAGGCCT AAATATTGTC TGAAAAAAT ATATGAGACC CATTACTCAG    60
TCTCTCCTCC TGCCATTAT ACTGCAGGTA TTCCCAAGT TTCTCTCTC AACCTTGCC      120
TCCTTTTCCC TGCTTGCTCC CTTAGTTTTC TCCTCTGGGT GGATGACTCC CAAATCTAGC    180
ACTGACCTGT TTGTCCACAT CTTTGAGTAT CCCACCACCA TTTCACACCC AGCATATCCA    240
GATGGAGCTC TTATCAGTTG TAACAGCACT GCTCAATTGC AG                          282

```

(2) INFORMATION FOR SEQ ID NO:171:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 350 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:171:

```

GAATTCGGCC AAAGAGGCCT AGTGGAAGAG AAGAATGTTT CTGTCTCTTC CTACGTTGAC    60
TGTTCTTATT CCACTGGTTT CTTTAGCAGG ACTGTTCTAC TCAGCCTCTG TGGAAGAAAA    120
CTTCCCACAG GGCTGCACTA GCACAGCCAG CCTTTGCTTT TACAGCCTGC TCTGCTTAT    180
TACCATACCA GTGTATGTAT TCTTCCACCT TTGGACTTGG ATGGGTATTA AACTCTTCAG    240

```

GCATAATTGA TGCAACTAGA GTCAATATGC TGTATATATT AATGATAGCT CTTGGGCATC 300
GATCTCTGAA AGCTCAAATG GATGGAATTT AGTTTGCGGG AACTCTCGAG 350

(2) INFORMATION FOR SEQ ID NO:172:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:172:

GAATTCGGCC AAAGAGGCCT AGGGGTGTAC ATTTTATTGG AAACCTTAAA TACTGTTTCAG 60
AAAGAATATA TCTTCAATCA AGGCTCTTGT GCAGCCTACA CAGAAAAATG AAGCTTTTTG 120
GGTTAGGTGC AACGCTCGAG 140

(2) INFORMATION FOR SEQ ID NO:173:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:173:

GTGGTCTCTC CTCCCCTGCC ACTCCCCTCT TCTTTTTTTT CCAACATGGC CTGCTCCGC 60
GTACATCGCC ACCCAGGGAC CGCTGCCCCG CACCGTGGCT GACTTTTGGC AGATGGTGTG 120
GGAGAGCGGC TGCGTGGTGA TCGTCATGCT GACACCCCTC GCGGAGAACG GCGTCCGGCA 180
GTGCTACCAC TACTGGCCGG ATGAAGGCTC CAATCTCTAC CACATCTATG AGGTGAACCT 240
GGTCTCCGAG CACATCTGGT GTGAGGACTT CCTGGTGAGG AGCTTCTATC TGAAGAACCT 300
CGAG 304

(2) INFORMATION FOR SEQ ID NO:174:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 188 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:174:

GCGATTGAAT TCTAGACCTG CCTCTCTTAT ACCTCGGTGT GGCCGAAAGG AAATAAGCAG 60
AGGCGCTATT GGCAGGACCT AGAAACTTTC CTGTGAACAT AGCTAGTATG TTCCCTCTGC 120
CCCTTCTTCA TCTTTTCCTC ACACTTGCTG GAGCTGGAGC AGCTATCCTG ACCGCAGGTG 180
CACTCGAG 188

(2) INFORMATION FOR SEQ ID NO:175:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:175:

```
GAATTCGGCC TTCATGGCCT ACTATCTGCC TTGCGTCCC ACTGCCCTGA CCTGTGCCCT    60
CTCACAGGCC CCCGTGATGG CTCGCTGGCC TCCCTTCGGC CTCTGCCTCC TCCTGCTGCT    120
GCTGTCCCCA CCGCCACTGC CCTTGACAGG GGCCCATCGC TTCTCCGCAC CTAATACCAC    180
TCTCAACCAC TTGGCACTGG CACCTGGCCG AGGCACACTC TATGTCGGCG CAGTGAACCG    240
CCTCTTCCAG CTCAGCCCCG AGCTGCAGCT CGAG                                274
```

(2) INFORMATION FOR SEQ ID NO:176:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:176:

```
GGTCAGCCGA GCATGATAGG AGACATCATC AACCTCGGCC TGAAAGGGAG GGAGGGGAGA    60
GCAAAGGTCG TCAACGTGGA GATCGTGGAG GAGCCCGTGA GTTATGTCAG CGGGGAGAAG    120
CCGGAGGAGT TTTCCGTCCC ATTCAAAGTG GAGGAGGTCG AAGATGTGTC GCCAGGCCCC    180
TGGGGGTTGG TTAAGGAGGA GGAAGGTTAT GGAGAAAGCG ATGTCACATT CTCAGTTAAT    240
CAGCATCGAA GGACCAAGCA GCCTCAGGAG AACACGACTC ACGTGAAGA AGTGACAGAG    300
GCAGGTGATT CAGTGGGCGA GCTCGAG                                327
```

(2) INFORMATION FOR SEQ ID NO:177:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:177:

```
GAATTCGGCC AAAGAGGCCT AAGCAATGTC TCCACCACTG CTGCTGCTAC CCTTGCTGCT    60
GCTGCTGCCT CTGCTGAATG TGGAGCCTGC TGGGGCCACA CTGATCCGGA TCCCTCTTCG    120
TCAAGTCCAC CTGGACGCA GGACCGTGAA CTA CTGAGGG GATGGGGAAA ACCAGCAGAG    180
CTCCCCAAGT TGGGGGCCCC ATCCCCCTGGG GACAAGCCTG CCTCGGTACC TCTCTCCAAA    240
TTCCTGGATG CCCAGTATTT TGGGGAAATT GGGCTGGGAA CGCCTCCACA AAACCTTCACT    300
GTTGCCTTTG AACTGCGCTC CTCCAATCTC TGGGTCCCGT CCAGGAGATG CCACTTCTTC    360
AGTGTGCCCT GCTGTTCCA CCACCGCTTC AATCCCAATG TCCTCGAG                                408
```

(2) INFORMATION FOR SEQ ID NO:178:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:178:

```
GAATTCGGCC AAAGAGGCCT AGGAGGAATT TCCATCTTGC TCTCAAAGTG AGTCTGAATG      60
TGCTCGGTGG TGTCACCCCC GCCGAGCTGC CAGTGCAGAA GGCCACTATT GAACTCCTGC      120
ACACGCCCCA ACTTGTGAGA TCGGTCAACA ACAAACAGGT TGTTCTTTTT GACTATCTTT      180
ATTGGCAGCT TGTCGAACTT ACTGGCTTGC TTGGGCTTCT CCTTTGGGTC TGCAGCGGCG      240
TCCGGGGCAG TCAGAGCGAT GCTGCTCTTT TCATCGCTTT CTGTCTTCTC GCTGTCTACC      300
TCGAG                                     305
```

(2) INFORMATION FOR SEQ ID NO:179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:179:

```
GAATTCGGCC AAAGAGGCCT AGTGCAGCAA TTTAGAGAGT GTCTCAGGAG TGTGGCTCAC      60
TGGCAGCTGC AGCTATGTTA GTGCTTCTTT CTGCCTCAAG TTCAGAAACA AGCTGGACTA      120
TCTCAGGTG ATTGAATTTT CCTGCTGTGG AATCATAGAA GTCTTGCACT CTCCCAGGTT      180
TGTGTTCAAG GTCTTCATAT TCAGATGCTT GAAGAATCAT TTCACATTGG TCTAGCATTC      240
AATCGAG                                     247
```

(2) INFORMATION FOR SEQ ID NO:180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:180:

```
GAATTCGGCC AAAGAGGCCT AGTCAAGTTC ATTTCCAGAG GTCTTAAGAC TAAGTTCTGC      60
CTCCTCATTG CAGGTGTGCC GAGAGTTTTT TTTGAACAAC AAAAATTACT AAGGAACCTC      120
ACTACCTTTG GCGGTAGAAT TAGAAAACAG ATTCAGCAGT CACCTACTCC CCTTCAGTAA      180
TTCGAGACAA TTATTTTCTT CCTGACACAA CATCAGGTCC CATGAAAAAT GACACCGTGC      240
CTGGTGTTTT TGGGTTCTTT AATGCTTCTT TTAGAGCCAC ATTTTCTTTT TCAAACCGAG      300
TTCCCATCGC TCGAG                                     315
```

(2) INFORMATION FOR SEQ ID NO:181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:181:

GAATTCGGCC AAAGAGGCCT AATTTTCTT CACGTTCTTT ATCACCACCA TGGTTATGTT	60
GGCTGCCCTG GCTCACCATT TGTTTTACTG GGATGTTTGG TTTATATATA ATGTGTGTTT	120
AGCTAAGGTA AAAGGCTACA GGTCTCTTTC CACATCCCAA ACTTTCTATG ATGCTTACAT	180
TTCTTATGAC ACCAAAGATG CCTCTGTTAC TGA CTGGGTG ATAAATGAGC TGCCTACCA	240
CCTTGAAGAG AGCCGAGACA AAAACGTTCT CTTTGTCTA GAGGAGAGG ATTGGGACCC	300
GGGATTGGCC ATCATCGACA ACCTCGAG	328

(2) INFORMATION FOR SEQ ID NO:182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:182:

GAATTCGGCC AAAGAGGCCT AGTTGTGGAA AAGAAAGACT GTGAGGGTAG GCACAAGAGC	60
ACTCAAATGT CCCAGGTAGA GAAACAACA TGTATGATGG CCCAGAAGGA GGCAAGTCTC	120
GAG	123

(2) INFORMATION FOR SEQ ID NO:183:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:183:

GAATTCGGCC AAAGAGGCCT ACTTGACAA GTAGAAAGTG GATGACCCAG GCTCCGTTAC	60
ATATACTTGG ATTCCAGCTG GGACCTAGAT TTGCTGAGGA CGGAAGCCAA GGACACAGGA	120
ACATGTGGCT GCTCCCAGCT CTACTCCTTC TCTGCCTCTC AGGCTGTTG TCTCTGAAGG	180
GCCCCGGCTC TGTGACTGGC ACTGCGGGG ACTCTCTGAC AGTGTGGTGT CAGTATGAGA	240
GCGATGTACAA GGGATATAAC AAGTACTGGT GCCGAGGACA GTACGACACG TCATGTGAGA	300
GCTCACTCGA G	311

(2) INFORMATION FOR SEQ ID NO:184:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 130 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:184:

GAATTCGGCC AAAGAGGCCT AGTTCAATCT GTAACAAGCC TTCTTCAATT TCCTCTCCAC	60
ATACCTTGCA TAGACTTTAA GATTCCTCTG CTCGATGCTA ATAAGAAGAC ACACACCCCT	120

CGTTCTCGAG

130

(2) INFORMATION FOR SEQ ID NO:185:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:185:

```

GAATTCGGCC AAAGAGGCCT AGGAGGGGGA AGAGAGTCCG TTTTGCAGAA GATGAAGAAA      60
AGAGTGAAAA TTCCTCGGAG GACGGTGACA TAACGGATAA GAGTCTTTGT GGAAGTGGTG      120
AAAAGTACAT CCCACCTCAT GTGAGGCAAG CTGAGGAGAC AGTGGACTTC AAGAAAAAAGG      180
AAGAACTAGA AAGGTTGAAG AAACATGTAA AAGGTCTACT TAACAGGTTG AGTGAACCCA      240
ACATGGCTTC CATCAGTGGG CAGCTGGAGG AACTGTACAT GGCCACAGC AGAAAGGACA      300
TGAATGACAC CCTGACCTCC GCTCTCATGG GTGCCTGCGT CACTGCCTCG GCCATGCCCA      360
GCAGACTGAT GATGGAGCAT GTTCTCTTAG TCAGCATCCT TCACCACTTA CTCGAG      416

```

(2) INFORMATION FOR SEQ ID NO:186:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:186:

```

GAATTCGGCC AAAGAGGCCT ACTACATTTT TACCTAAATT TATAGAAAAT CAATTCGGAT      60
TGACATCCAG CTTCGCAGCT ACTCTGGAG GGGCTGTTTT AATTCCTGGA GCTGCTCTCG      120
GTCAAATTTT AGGTGGCTTC CTTGTTTCAA AATTGAGAAT GACATGTAAA AACACAATGA      180
AGTTTGCACT GTTCACATCT GGAGTTGCAC TTACGCTGAG TTTTGTATTT ATGTATGCCA      240
AATGTGAAAA TGAGCCATTT GCTGGTGATAT TGAATCATA TAATGGGACT GGAGAATTGG      300
GAAACTTGAT AGCCCCTTGT AATGCCAATT GTAACGTACT CGAG      344

```

(2) INFORMATION FOR SEQ ID NO:187:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:187:

```

GAATTCGGCA AGAGCCTAAA ATCTACAAGC ACCAGGAAGT CAAGATGCAA GCACCAGCCT      60
TCAGGGACAA GAAACAGGGG GTCTCAGCCA AGAATCAAGG TGCCCATGAC CCAGACTATG      120
AGAATATCAC CTTGGCCTTC AAAAATCAGG ACCATGCAAA GGGTGGTCAT TCACGACCCA      180
CGAGCCAAGT CCCAGCCCAG TGCAGGCCGC CCTCAGACTC CACCCAGGTC CCCTGCTGGT      240
TGTACAGAGC CATCCTGAGC CTGTACATCC TCCTGGCCCT GGCCTTTGTC CTCTGCATCA      300
TCCTGTCAGC CTTTCATCAT GTGAAGAATG CTGAGATGTC CAAGGAGCTG CTGGGCTTTA      360

```

AAAGGGAGCT TTGGAATGTC TCAAACCTCCG TACAAGCATG CGAAGAGAGA CAGAAGAGAG	420
GCTGGGATTG CGTTCAGCAG AGCATCACCA TGGTCAGGAG CAAGATTGAT AGATTAGAGC	480
GACTCGAG	488

(2) INFORMATION FOR SEQ ID NO:188:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:188:

GAATTCGGCC AAAGAGGCCT AGGTCAGATG CATTAAAACA TATCAAAATG TTACAAAAAT	60
GTATGGCTCC CTTGCTGAGG CCCTGTCAGA TTATGTTAGA TGAGTAAACG CATCAGTGTG	120
TAAGTTCAGA ACCAAACGTT GAATCAAGTC ATGTACTCTC GAG	163

(2) INFORMATION FOR SEQ ID NO:189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:189:

GAATTCGGCC AAAGAGGCCT ACCTGCTCAT ACCTGTGGCC AAAAGCATGA TGCCCCAGGC	60
TCTGCCTCCA ATTCTACCAT CTTCTTCCAT CTTTCTCTTT TATCAGGTCT CTGCCCTCCT	120
GTACTTTGTA CTTAGATTCT CCTCTGCCAA GCCCATTGAG ACTGTGACTG GTAGGAGTGC	180
TGTGCTCAGC TTTCCACTTG AGTGTTTATC CAAGAAGTTG GATAACCCCTC TCAAGTTATG	240
GCCTCCATTG CAGTGCGCCT CAGTCTATGG GGATGCATTC CACTCACCCCT TGGGCCTAGG	300
GCAGGTCGAG	310

(2) INFORMATION FOR SEQ ID NO:190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 516 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:190:

GAATTCGGCC TTCATGGCCT AGGGCCTCAG TCTTTTTACT TTTGCGGCTG TGTTTCTCTG	60
AAGGCTTGGC ATTAGTAGAT TGAAAAGAAT AACCATCTAG GGAAATGTGA ATTCAGTTTC	120
TTTCTGACAT TCTGCTCTCT ACAAGGGGAT ATTATGTACA CATAAACCTA CTTCCAAAAAT	180
AATGAAGTGA GGCCTAATC CTTACTCTTC AGAGAGCCCA CTGTGGAAGT GTCAGTGACC	240
TTGTGTATGG GCTGCCCTTC ATGGCTCTGG GAGTCATTAT AAAGGGCAGC ATTGGCGGTG	300
GTGCGTCCTA AGCCAGTGT TCTCGGCTCT GTTCCTTAAA CATGTGTTAG TGTTAATAGA	360
TGTTCTTGGG AAAAAAAAAA AAAAAACAGC ATTCTGAGGT CAAACATGCT CAGAAAGCTT	420
GGAATCTGCA CTACGCTTCT CGTACACATT TCATATTAAA GATTTTGGAA AGTCCTGCAA	480

TACAGAGCCC TGTCTAATAT TGCCACAGCC CTCGAG

516

(2) INFORMATION FOR SEQ ID NO:191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:

```

GAATTCGGCC TTCATGGCCT ACTTGCTAGA TAGACAGATT AAGAATGTTG AAGACATGGT      60
CCAGTTTATT AATAACATTT TGGATGGCAC AGTAGAAGCC CAAGGAGGTG ATAGCATTTT      120
GCAGAGATTG AAAAGAATAG TATTGATGC CAAATCTACT ATTGTGTCTA TATCAAGAG      180
CTCACCCTG ATGGGCTGCT TTCTCTTTGG CTGCCACIG GGTGTCATCA GTATCATGTG      240
CTATGGAATC TACACAGCCG ACACAGATGG AGTTATATA GAAGAACGAT ATGAAGTGTC      300
TAAAAGTGAA AATCTCGAG                                         319

```

(2) INFORMATION FOR SEQ ID NO:192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:

```

GAATTCGGCC TTCATGGCCT AAGCAGAAGG ACATATTAGA GAAGGATTGT ATAGTTTTCT      60
GGTAAAGAT GACAGTGAAT TGTATGGCGC ATGGATTAGC CGTGAAGGT GTTGAGTATA      120
AGTGGTCTCC AGCCAACTC TATGGTTACT GGAATAAGAG AGTAGGAACC TTCTCAGGCT      180
TTATCTTTAT CTATTCTTGT CAACAGTATG TACATGTGTC CCCCAGCCCC AAATAACTGT      240
ACAGTTTAAAT GATGTTCACT CTATACAGTT CCCAGAATCC ATTGGAAATT GCTGTAACAG      300
CATATCCTCA ATGCCCATCA ATTCTCCACG TCCAACCTCT CCATGGCCTC CTCTGCCTCT      360
GCTGATCTGT GAACTTCTCG AG                                         382

```

(2) INFORMATION FOR SEQ ID NO:193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

```

GAATTCGGCC TTCATGGCCT AATATTTTAA AAGCGAAAGC TAACTTCTAA TTTTGAAAAT      60
TTTTATTGGG AGCAGGATAT TATAATAATA ATCTTAGTT GTTAAACCAT TAAACATCAA      120
GGTTTTTTAC ATTGTTTCTA TGCCTCCTCC CTCAAAAAAA AAAAACCTCC TACAATAAAA      180
CTGAAAAAAT GCACAAAGAC ATATTAGTGG AAGACCACTG CTTGTTTAC ACAAAATGAAG      240
AGTATAAAGC AGAGAAGTGC TCCTTGGGGC AAAAGGCAAT TGGCAAAAAG CTAAGGAACA      300
TTTTCATAAT GAATTAGAAA TACAGATCAT CAGGAATATC CAGGAAGCGA TAGTGAATAC      360

```


CAGGCAGGCT TAAGAGACAG GAAACATTTA GCATGTTGGT AAACCACTTT AGCACATCAG 420
 CAAAAGCATA TAAACAGCTT TAGGATTGGA AATTATTGCC AGGGGGGACT CGAG 474

(2) INFORMATION FOR SEQ ID NO:194:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:

GAATTCGGCC TTCATGGCCT ACGTNNCTAT GTCTTCAAGC ACAGAGGTGT CCAGGTGTAT 60
 TGCACATCTT CATCGCACTG AGCTGCATGG ACAGCTGATT TCTGTGGAAA AAGTATAAGG 120
 TGATCCCTCT CAGAAAGAAA TGAAGAAAGA AAATGATGAA AAGAGTAGTT CAAGAAGTTC 180
 TGGAGATAAA AAAAATACGA GTGATAGAAG TAGCAAGACA CAAGCCTCTG TCAAAAAAGA 240
 AGAGAAAAGA TCGTCTGAGA AATCTGAAAA AAAAGAAAGC AAGGATACTA AGAAAATAGA 300
 AGGTAAAGAT GAGAAGAATG ATAATGGAGC AAGTGGCCAA ACATCAGAAT CGATTAAAAA 360
 AAGTGAAGAA AAGAAGCGAA TAAGTTCCAA GAGTCCAGGA CATATGGTAA TACTAGACCA 420
 AACTAAAGGA GATCATTGTA GACCATCAAG AAGAGGAAGA TATGAGAAAA TTCATGGAAG 480
 AAGTAAGCAA ATGCTCGAG 499

(2) INFORMATION FOR SEQ ID NO:195:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:

GAATTCGGCC TTCATGGCCT AAGCAAAAGA GCATTAAGAA GTGTCTGTTT TTGTTATTGC 60
 CATTTCAATA ATATTTTAGT AGGTGTTCAA TTTCATTGGA TATTCTTTTT TTTTAATTGT 120
 CTTTGTACCT ATGATTGAAA ACAGTAGTTG GTCTATGACT TTGAGGAGA GGGAGAACCG 180
 AAGATTACAG GAGGCCAGCA TGAGGTTGGA ACAAGAGAAT GATGACCTTG CCCATGAACT 240
 AGTAACAAGC AAAATTGCTC TACGGAATGA CTTGGATCAG GCAGAAGACA AGGCAGATGT 300
 GTTGAATAAA GAGCTCCTTT TGACCAAAAC CCTCGAG 337

(2) INFORMATION FOR SEQ ID NO:196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:196:

GAATTCGGCT TCATGGCCTA AAGGAACTG ACAAATTATC CCCAGCTGCC AGAAGAAGAA 60
 ATCCTCACTG GACGGCTTCC TGTTTCTGT GGTTCATTAT CTGATTGGCT GCAGGGATGA 120
 AAGTTTTTAA GTTCATAGGA CTGATGATCC TCCTCACCTC TCGGTTTTCA GCCGGTTCAG 180

GACAAAGTCC AATGACTGTG CTGTGCTCCA TAGACTGGTT CATGGTCACA GTGCACCCCT	240
TCATGCTAAA CAACGATGTG TGTGTACACT TTCATGAACT ACACTTGGGC CTGGGTGGCC	300
CCCCAAACCA TGTTCAAGCCA CACGCCTACC AGTTCACCTA CCGTGTTACT GAATGTGGCA	360
TCAGGGCCAA AGCTGTCATC CTCGAG	386

(2) INFORMATION FOR SEQ ID NO:197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:197:

GAATTCGGCC TTCATGGCCT AGTTTTGTGC TTTTTTCTT TTTTGGTATT ATTTTGTGTTG	60
CCACTTATTC CTAAAATTCA TATTGCTATT AACCGTACAC ATCTTTCCAT GTTCTTATAA	120
TAATCTACAA ACATCTCTCC CTTTCTGTAG CTCTCTCTGT CACACACACA CACATGCACA	180
CACGCACACA CACACACACA CACACGCTGT GCACTCTCCT GAAGCATGTG TGTACATACA	240
TACATATGTG AGGGGTTTGA TGACTGTTTT ACCAAATTGT GTTCTTAATA TATACAATGT	300
TGGCTTCTTT TTAGCCATTC AGAAGTTATT TCAGTCATGG AATGATCTCT AGCCATATAA	360
CTGAAAACAG GTAAGTTTCT TTCTTGGGGA AGAAGGGCGA ATGGTGATAG AGAAAATGGA	420
GAGCTCGAG	429

(2) INFORMATION FOR SEQ ID NO:198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:198:

GAATTCGGCC TTCATGGCCT ACCAAGCTAT GCAGGAACAG TTGTCTAAGA ACAAAGAACT	60
GACACAGAAA CTCCAGGTAG CCTCTGAGAG TGAGGAAGAG GAGGGAGGCA CAGAAGATGT	120
GGAAGAACTC CTTGTCCCTG ATGTAGTGAA TGAAGTGCAG ATGAATGCAG ATGGGCCGAA	180
TCCCTGGATG CTCAGGAGCT GCACCAAGTGA CACCAAAGAG GCTGCAACCC AGGAGGACCC	240
TGAGCAACTG CCAGAGCTTG AGGCCCATGG AGTTTCTGAA AGTGAGGGAG AAGAAAGACC	300
AGTGGCAGAA GAAGAAATTT TGTGAGAGA ATTTGAAGAA AGGCTCGAG	349

(2) INFORMATION FOR SEQ ID NO:199:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:

GAATTCGGCC TTCATGGCCT AGGGAAAGCT CCAACTTGCT TTACCTTTCT AAGATATCCC	60
ATTTTCTCTA TACCATTGTT TGACTAATAT ATCTCTTGCC CACTGGTTTG TAACAGTGCC	120

```

TTAATTAGTT TTTGTGTTTG AAGTTCAGA ATCTCTTCCT GGCCTATGTA TTGTGTTCCG      180
TTGATGGATC TTTCCATCCC ATGGTACCCT TTACTATTAT TGTCTTCATT TTTATTACTA      240
TTGTTATGCC CTTTCTCTC TCCGTGCACA TCTTCATGTT TGAAGTCTAA AAACACACCG      300
CCAACGCTCG AG                                                              312

```

(2) INFORMATION FOR SEQ ID NO:200:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 385 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:200:

```

GAATTCGGCC TTCATGGCCT AATATATCCA AGTAATAGCA TGTACAGTTT GGTAAGCAAT      60
ATAATAGAGA GATATTCACA GTGAAATAGG AAAGAGCAGT ATAGGTGCAA AGACAAAAAG      120
CATGACACAG CTAGATACAG GGCAGCTGTT ATTGGTTTTG TATGGAGAAA ACCTGGAGAA      180
ATGGTGAGAG AAGGGGCAGA AGATGAGAGG GGCCAGATCA TGGAGTACCT GTTTGTGGCG      240
CTCAGGAGTT TAGATGTTAT CATGCAGATA ACTAGGAGCC ATTTGAGGAA CTTAAATACA      300
GGAGTGATAC CAGATTTATA TGTTTTTAAA ATGATTACTT GGTGGTAATT AAAGAAAAGA      360
TTGGATGATT TAGGCAGATC TCGAG                                              385

```

(2) INFORMATION FOR SEQ ID NO:201:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 204 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:

```

AATTCGGCCT TCATGGCCTA CGTTTTTTTA AATTTTTTTA ACTACATATT TGATACGATC      60
TTTTCTTCT TGCCTTCTTT TTGATTACTT ACTTTCTACC ATTCTATGTT TTTCGTCACT      120
AGTTTGAAAA TTGTATACTT TGTTTTTATT CTTTCAGTGG TTACCCTAGA AATTACAACA      180
AACAAAAATT GCAACAACCT CGAG                                              204

```

(2) INFORMATION FOR SEQ ID NO:202:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 450 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:

```

GAATTCGGCC TTCATGGCCT AAAATCATCA TGCATATTTA TTTCTCCAAA GCACCTTTGA      60
CAAGCATGAT TTGGATAGAG ACTGTGCTTT GTCACCTGAT GAGCTTAAAG ATTTATTTAA      120
AGTTTTCCCT TACATACCTT GGGGGCCAGA TGTGAATAAC ACAGTTTGTA CCAATGAAAG      180
AGGCTGGATA ACCTACCAGG GATTCTTTT CAGTGGACG CTCACGACTT ATTTAGATGT      240
ACAGCGGTGC CTGGAATATT TGGGCTATCT AGGCTATTCA ATATTGACTG AGCAAGAGTC      300

```

TCAAGCTTCA GCTGTTACAG TGACAAGAGA TAAAAAGATA GACCTGCAGA AAAAACAAC 360
TCAAAGAAAT GTGTTACAGAT GTAATGTAAT TGGAGTGAAA AACTGTGGGA AAAGTGGAGT 420
TCTTCAGGCT CTTCTGGAG AAGACTCGAG 450

(2) INFORMATION FOR SEQ ID NO:203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 558 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:

GAATTCGGCC TTCATGGCCT AACTGGTTTC TGGCTCGTGG ANTCTGTTTC AAGATCATAT 60
AAGCCGTTGC CATTCCCAAG NAGCGCTGGG ATATGCTCCT TCTCAGATGC TGCTATTTCA 120
GTGAAGGTAT TTAATGCTTG TTCAACATTA GATTCTGTT TGGTAGCCAT TAAGCAATAG 180
TTTTCCATTA TCGAANCTG TACGTGACCC TGAACAGTCT GAGGTTTTAG TTCCTTAANA 240
AGTTTTTCTG CTGTTCTTAC TGCCAGTTGC ACAGATTCTT GCTTCTCAGT TGAATAACCC 300
AGGTCTCCAT CCAGGTTTTC AAATACTTCA CCTCCAACAG TTTCATTATC TGATTCAAA 360
CAGATCTCTA TCATATTATA AAGGGCATT TGGCCCCAGT CACGATCTTT CCGAGCTTTA 420
TTAAATGTC GAAGGGCATC ATTTGGTTCT CCAGTGTAAC AAAGATACAG TCCTTTACAA 480
TACTGAAATC CTGGTTCCAA TTTGCTCTG GAGNNACGTT TCTCAGCCAT TGAGAAAAAT 540
CTTGGGACAT CCCTCGAG 558

(2) INFORMATION FOR SEQ ID NO:204:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:

GAATTCGGCC TTCATGGCCT ACAAGTAGGG ACTGACTTCT CTAGGTTTCCT ACAAAGCTCT 60
TCAACCACAC TCATTTCAAG CTCTGTCAGA ACAGCATCTG AATTAGGAGG ACTTTGGGAT 120
TCTGGGATAC AGGAAGTATC CAGAGCTTTG GATATAAAAA ACCCTGGGAC AGATATTTTG 180
CAGCCTGAAG AGACCTATAT AGACCCTACT ATGATACAAT CTTTAACCTT TCCTTTGGCC 240
CTTCATAATC AAAGCTCCGA TAAGACAGCT AACATTGTGG AAAACCCATG TCCTTGAGATT 300
CTAGGAGTGG ATGTAATATC TAAAGAGACA ACTAGGAGGA AGCTCGAG 348

(2) INFORMATION FOR SEQ ID NO:205:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:205:

GAATTCGGCC TTCATGGCCT AAGAAAAAAA AGAAAGAAAA AAAATGATAC TTTCCAGGTT 60

CGCTTGGGTC CAGATCTGTA TTCCCAGGGC TCATAGAGAT ATTGGCAAAC TGACAGATTT	120
CATGGGCTCAA GAAACCTAAA GACACCTACT TGAATTCCTT TGGTTGGCAG TCAAATGTTA	180
ACTAGTGTGT TTTCAAGCTT CTATTCTTAG GCATGTTACT TCCTTTTGGGA AGTCAAAACC	240
AACCATCTTT TAAGTAAGAG GGCTAACCAA ATATGTGCCA CACTAACTCG AG	292

(2) INFORMATION FOR SEQ ID NO:206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:

GAATTCGGCC TTCATGGCCT AAAATATTAA AATCTTTGAA GAAGAAGAAG TTGAATTTAT	60
CAGTGTGCCT GTCCCAGAGT TTGCAGATAG TGATCCTGCC AACATTGTTC ATGACTTTAA	120
CAAGAACTT ACAGCCTATT TAGATCTTAA CCTGGATAAG TGCTATGTGA TCCCTCTGAA	180
CACTTCATT GTTATGCCAC CCATCTCGAG GCAGGCTAG	220

(2) INFORMATION FOR SEQ ID NO:207:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

GAAAAATGG CCAAGGCTAC TGGGAACTA AAGCCAACTT CTAAAGATCA GGTATTGGCC	60
ATGCTAGAGA AAGCCAAAGT TAACATGCCA GCCAAGCCTG CTCCACCCAC TAAAGCAACT	120
TCTAAACCAA TGGGAGGGTC CGCTCCAGCC AAATTCAGC CTGCATCAGC ACCTGCTGAA	180
GATTGTATTT CCAGCAGTAC AGAACCCTAA CCTGATCCAA AAAAGGCCAA AGCTCCAGGA	240
TTATCCTCTA AAGCAAAGAG TGCACAAGG AAGAAGATGC CAAGCAAAAC CAGCTTAAAG	300
GAGGATGAAG ACAAATCCGG GCCTATACTC GAG	333

(2) INFORMATION FOR SEQ ID NO:208:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:208:

GGAGACAAGT TCTCCTCAGT GAACTGGCAG TACCAGTGTG GGCTTACCTG TGAGCACAAG	60
GCCGACCTTC TCCCTATCAG TGCATCCGTC CAGTTTATTA AAATCCTGC ACAGTTACCC	120
CACCCCTGA CAAGATTCCA GATCAATTAT ACAGAGTATG ACTGCAACAG AAATGAGGTG	180
TGTTGGCCGC AGCTTCTATA TCCATGGACT CAGTATTATC AAGGGGAGCT GCATTCTCAG	240
TGTGTTGCTA AGGGCTTACT GTTGCTGTTG TTCCTCACAT TGGCCTTGTT CCTCAGCAAC	300
CCCCGGACCA CTCGAG	316

(2) INFORMATION FOR SEQ ID NO:209:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 517 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:209:

```

GAATTCGGCC AAAGAGGCCT ATGTCCCTGT CCATCTTAGA GGCTGACCAA GCCCAGCCAT      60
GGGTGGTCCA AATGCTTAG GTGGTCCCAA TTGCTTGGCT GGCCCAAGAG ATGTCTGGTT      120
CTTAACAATA CAAGAGCCTA TAGAAATTGC TAAAGGGATT TCAGCCACAA CTGAAGCTCA      180
CCAAGAATGA GTTTTCTGGA ACTGGTTAAA GTGTCACAGT AGGGAGTAAG GAAATAAGAA      240
TCCCCACCAA ACATAAGAGA ACAGAATGAT AATAGTCCCT ACTAGTCCAT GACAAGGCTG      300
CCAATTAGGC ATTAAAGCT ATCAAAGATG ATGCTGTGAG GGACCTGGCA ACTTTGTAA      360
TAGTCTGACT TTAATGTTT TATTAATGGC CAAGCAGCAA ATATTTTAGG ATTTGTAGGC      420
TATATGGTCT CTGTCCCAAT TACTCCATC TGCTACTGTA GCATAAAGC AGCGATACAT      480
CCTAAACCCG TCGATTGAAT TCTAGACCTG CCTCGAG      517

```

(2) INFORMATION FOR SEQ ID NO:210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 829 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:210:

```

GAATTCGGCC AAAGAGGCCT AAGAACATGA AACATCTGTG GTTCTTCCTT CTCCTGGTGG      60
CAGTCCCCCG ATGGGTCCTG TCCCAGGTGC AGCTGCAGGA GTCGGGCCCA GGACTGGTGA      120
AGCCTTCGGA GACCTGTGCC CTCACCTGCA CTGTCTCTGG TGATTCCATC AGTCATTACT      180
ACTGGACCTG GATCCGGCAG CCCCAGGGC AGGGACTGGA GTGGATTGGA TATTTCATT      240
CACC CGGAA CTCCAAC TAC AATCCCTCCC TCAAGAGTCG AGTCACCATG TCAGTCGACA      300
CGTCCACGAA CCAGTTCTCC CTAAACTCA NTTCTGTGAC CACTGCGGAC ACGGCCGTCT      360
ATTACTGTGC GAGAGACCTA TATTGCCGTG GGGGAACCTG CTACCCCGCG AGACTTGACC      420
GCTGGGGCCA GGGAAACCCG GTCATCGTCT CGTCAGCCTC CACCAAGGGC CCATCGGTCT      480
TCCCCTGGC ACCCTCCTCC AAGAGCACCT CTGGGGCACA GCGGCCCTGG GCTGCCTGGT      540
CAAGGACTAC TTCCCCGAAC CGGTGACGGT GTCGTGGAAT TCAGGCGCCC TGACCAGCGG      600
CGTGACACCC TTCCCGGCTG TCCTACAGTC CTCAGGACTC TACTCCCTCA GCAGCGTGGT      660
GACCGTGCCC TCCAGCAGCT TGGGCACCCA GACCTACATC TGCAACGTGA ATCACAAGCC      720
CAGCAACACC AAGGTGGACA AGAAAGTTGA GCCCAAATCT TGTGACAAAA CTCACACATG      780
CCCACCGTGC CCAGCACCTG AACTCCTGGG GGGACCGTCA GTCTTCCTC      829

```

(2) INFORMATION FOR SEQ ID NO:211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:211:

```

GAATTCGGCC AAAGAGGCCT AGTTAATCTG ATAAATTCAC CATCAATTG GTAAGCTTTA    60
ATATAACTAC CCTGTTTTTT GAATACAGAT AATGCAAAAG AAAACCATT TATACTCGGC    120
TATATACCTT CCACCACTCG AG                                           142

```

(2) INFORMATION FOR SEQ ID NO:212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:212:

```

GAAATTCGGC CAAAGAGGCC TAGTGGAATC ATTCTGCCAC ACCATTTCCT ACTCAAATAG    60
GTACAAACAT ACCACAGACA CTCCCATATA CACATGCTCC TCTATCCGCC AACTCTGGAA    120
CCAAAACTAA ATTGGTCTTC AAGAGAGATG ATGGCTTTAA GAACAAAAAT AGCCTTATCC    180
TCTATTTTAC TTGCTGTACT GTTGTACTGT TTATTTAAGA AACAAGCTGG TGGTTGATGT    240
CCAGGAAAAA TTATCTTTTC AAAATGAGGG AAGAGGAGGT TCACCATGTG GATATGGTGT    300
GCCTTTCAAC ATCCTTAAGG ATTGTTGATA TCATTATTGT TAATCAATTG TTGTCAGCAC    360
AGTGGCTGCC CAAGCTGTGC AAATGAAACA GCCAATCAGC AGGAGAAAGT GATGAAATTA    420
AATGACCTCT TTCCTTAACC ACTCATCCGT AAGCCTTGTT ATTTTTCATA CAAACCTCGA    480
GCCGGGGGAG GAGGGGCGGC GCGAATGCT GGGAGAGTCA GGTCTAGAAT TCAATCGTAG    540
GCCTCTTTGG CCGAA                                           555

```

(2) INFORMATION FOR SEQ ID NO:213:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 97 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:213:

```

GAATTCGGCC AAAGAGGCCT ACGAGAAGGG CGGTGTGTAC AAAGGGCAGG GACTTAATCA    60
ACGCAAGCTT ATGACCCGCA CTTACTGGGA ATTCCTC                                           97

```

(2) INFORMATION FOR SEQ ID NO:214:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:214:

```

GAATTCGGCC AAAGAGGCCT AAGAAGAAAT TGGTAGATTG CGAGAAGAGA TAGAAGAATT    60
AAAACGTAAT CAGGAACCTT TACAAAGCCA GCTGACTGAA AAGGACTCTA TGATTGAAAA    120
TATGAAATCT TCCCAAACAT CTGGCACAAA TGAACAGTCT TCAGCAATAG TTTCAGCTAG    180
AGATTCTGAA CAAGTTGCAG AATTAAACA GGAAGTGGCA ACTTTAAAGT CTCAGTTAAA    240

```

```

CTCACAATCT GTGGAGATCA CCAAACTACA GACAGAAAAG CAGGAACTGT TACAGAAAAC      300
AGAAGCGTTT GCAAAATCAG TTGAGGTACA AGGAGAGACC GAGACTATAA TAGCCACCAA      360
AACTACTGAT GTAGAAGGAA GACTGTCAGC ATTATTACAA GAGACCAAAG AGTTAAAGAA      420
TGAAATTAAG GCTCTGTCTG AGGAAAGAAC TGCCATTAAA GAGCAGCTGG ATTCATCTAA      480
TAGTACC                                           584

```

(2) INFORMATION FOR SEQ ID NO:215:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:215:

```

GAATTCGGCC AAAGAGGCCT ACTGGGCCTT TCAGCACCTG CTCCAGCTTC ACCTTGGTGA      60
ACATCAGGTT GAAGTTCTCA GGGTGCTCGG TGATGGCCAT GTTGACAACA TCCAGGGCAT      120
GCTGGTGGTG CTTCTGGGCA GAGAAGAGCA GTGCCAGCAG GTGGAGGGCG TGGGCATCAT      180
CCTTGCGTAC CTTCAGGGCC TCCTGCAGCT GCTCCATGGC ACTGGAGATC TGTCCGACGA      240
GGGCCAGCTG CAGCGAGACA TAGAGGATGA CCTGGGGGTC ACTGGGGGCC AGCTGCTGAG      300
CCCTCTCCAG CGTCTGCAGT GCCTTCCGGT GCAATTCATC TTGCTTGGAC TTCAGGGTGG      360
CGTCGGTGGC CTGCAGGCTA TAGGTGAGAC CCAGAGCCAG GTAGCCCTTG GGGAGGAACT      420
CCCCGGCTTC CTCTCCGAGG CTGATCACCA TCATGGCAAA GTGCTCTGCT TCCTCTAGCC      480
AGCGAAGGGA CCCGATGCAG ACCTTCGCGG CCATCAGGGG CACGGTGGGG TCCGAGGGCC      540
GCAACTTCAC ACACTCCCGC AGCAGGGACA CAGCGTAGGC TGAC                                           584

```

(2) INFORMATION FOR SEQ ID NO:216:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:216:

```

GAATTCGGCC AAAGAGGCCT AGACCTGCCC TAAAGATAGA GTCTTGATGC ACCGTCTACC      60
TTGTCCCCAA CCAAGAGTGA GTAGTGACA GAAGTCTCCT GGCACCCTGG GAATCCTGCA      120
TTTTTAATGG ACGAGCAGGG CAGGAAAGAA AAAAAAACC CAAACCCCAT CACTCTGCCA      180
GCCCTGTGA CCAAGCAGC CCAAATCAGT TACCTTGACA ACTCTCATGC ACAGACTGCA      240
CCAGCCTGTG TTGCAACAT CACTGCCCCG CTTCTAACAG GAAGAGATAC TCTTTTGGGG      300
GTCTTGCAAG GCCCAGGACC AGAGCCCCTT CTACCCAGGG CCCTTCCAAA GGCAAAGCAC      360
AGAGTCACAT TTGGGCGTGG CATGAGAGGG AAATAAAGAG ATTTGGCTGT AGTGGGAGGG      420
AGGTTTCAGT GCTTTTCTG GGGACATTGG TGCCTATCTC TATTCTGAGA GTTGTCTCC      480
TCATAGGACA CCATAAATCG CATCCAGGAC CTGCTGGCTG AGGGTACTCG AG                                           532

```

(2) INFORMATION FOR SEQ ID NO:217:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:217:

GAATTCGGCC AAAGAGGCCT AGTGTGTCCG GGTCTTATAC AAAACAACA CAGTGAATGA	60
AGGAATAAAT ATTTATTGAA TGGAAATCA GCAAAGGAAA AAATTGTATA ATTGTCAATG	120
ACAATGGGAA GCACATAGTG AGGCTATGAG TGATTGGAA ATCATGAGCG TGCAGTGT	180
TGTTACGCA TTTCGGTTGT GTTTTCAGAA AGTAACTACA ACATAGCATC ATGTAGCAGA	240
ATTGCTGGTT GTAAGCAAAA AGGCTCGAG	269

(2) INFORMATION FOR SEQ ID NO:218:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 675 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:218:

GAATTCGGCC AAAGAGGCCT AATTCTTTTT CTTTTTAATT TGAAGAAAA TCATCAGTCT	60
TGGAATACAG AAGAGAACT AGAAATATAC GTATTTTGT TCACATTGA ACAGTCATTC	120
TTGAGGAATA CTCCATACCT GAGTAGACAG CCATGTGGCC ATCGCAGCTA CTAATTTTCA	180
TGATGCTCTT AGCTCCAATA ATTCATGCTT TCAGCCGTGC CCCAATTCCA ATGGCTGTGG	240
TCCGCAGAGA GCTATCCTGT GAGAGCTATC CTATAGAGCT TCGCTGTCCA GGAACAGACG	300
TCATCATGAT AGAAAGTGCC AACTATGGCA GGACTGATGA CAAAATTTGT GACTCTGACC	360
CTGCTCAGAT GGAGAATATC CGATGTTATC TGCCAGATGC CTATAAGATT ATGTCTCAAA	420
GATGCAATAA CAGAACCCAG TGTGCAGTGG TGGCAGGTCC TGATGTTTT CCAGACCCGT	480
GTCCAGGAAC CTATAAATAC CTTGAAGTGC AGTATGAATG TGTCCTTAC ATTTTCTTT	540
GTCCTGGACT ACTAAAAGGA GTATACCAGA GTGAACATTT GTTTGAGTCC GACCACCAAT	600
CTGGGGCGTG GTGCAAAGAC CCTCTGCAGG CATCTGACAA GATTTATTAT ATGCCCTGGA	660
CTCCCTACAG AACTG	675

(2) INFORMATION FOR SEQ ID NO:219:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:219:

GAATTCGGCC AAAGAGGCCT ACTCCCTGTT TTGAACAAGT TTTTGTGAGA ATTCTTAGTT	60
TTAGTTTTTG TTTAGCTTAC AACTGAAAA TTTTGAGAAG CATCTAAAAA AATCCACAAT	120
TAGTGCAAAA AGAGGGGACA ATACTTTAAG TCATTCCTTC TATAAAAAGA ATTAAGGTTA	180
CTAAATGCCA ATTTTAAAGC AAATATATAG TTTCTTATT GCCTTCTGAA AGACAGCAGA	240
TATAAAAATA GTTCAATATT AGGTTTAACA AGGTTGAAC AACACATGTA CTATCAGCTT	300
TATTTTACCT GCAAAAATAT TTTAGCTACA CTTGGAAAAA AATAAACTTG AGAATATAAC	360
TTACATTTT TAAGGCCAGA TGCAAGAATA CTTATTTAGG CCTCTTTGGC CGAA	414

(2) INFORMATION FOR SEQ ID NO:220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:220:

GACCGTCGAT TGAATTCTAG ACCTGCCTCG AGATTGGAGA CAGAAGGTCC CGGGAGCAGA	60
AAGCCAAACA GGAGCGGGAG AAAGAACTGG CAAAAGTCAC TATCAAGAAG GAACTCGAG	120

(2) INFORMATION FOR SEQ ID NO:221:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 333 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:221:

GAATTCGGCC AAAGAGGCCT AAGCAGCAGC TGCTTATATG CATGTGAACA GCTGGGGAAT	60
TAATTTGGTA TGCATTCTCA GGAGCCACTC ATCTGCTGGC AGAGGTAGCA GAAGAATGCC	120
CTTAGTGTA GTCCTCTACA ACCATACACC AAATGTGCTC CCTGCATTTC AAATTCCATT	180
GTAGAAAGTC TCTGATAATC TCACTTATAC CATGAGCCAT TCCTCAGTAT CTGTCTCTCT	240
CCTGTTAGTG TTCTACAATT CCTTCTCCT TAATTTTCT CCGCTTTACA AAATGTCACA	300
CAGACAAGTG CATAATACTT AAACAAGCTC GAG	333

(2) INFORMATION FOR SEQ ID NO:222:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 817 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:222:

GAATTCGGCC AAAGAGGCCT AAGAAAAGCA CCCTTATTAA GAATTGCAGC AAGTAAGCCA	60
ACAAGGTCTT TTCAGGATGA TTTTCTTATA TCAAGTGGTA CATTTCATT TATTACTTC	120
AGTTTCTGGT GAATGTGTGA CTCAGTTGTT GAAGGACACC TGCTTTGAAG GAGGGGACAT	180
TACTACGGTC TTCACACCAA GCGCCAAGTA CTGCCAGGTA GTCTGCACTT ACCACCCAAG	240
ATGTTTACTC TTCACTTTCA CGGCGGAATC ACCATCTGAG GATCCCACCC GATGTTTAC	300
TTGTGTCCTG AAAGACAGTG TTACAGAAAC ACTGCCAAGA GTGAATAGGA CAGCAGCGAT	360
TTCTGGGTAT TCTTTCAAGC AATGCTCACA CCAAATAAGC GCTTGCAACA AAGACATTTA	420
TGTGGACCTA GACATGAAGG GCATAAACTA TAACAGCTCA GTTGCCAAGA GTGCTCAAGA	480
ATGCCAAGAA AGATGCACGG ATGACGTCCA CTGCCACTTT TTCACGTACG CCACAAGGCA	540
GTTTCCCAGC CTGGAGCATC GAAATCTTTG TCTCCTTAAA ACATCTGAGA GTGGATTGCC	600
CAGTACACGC ATTAAAAAGA GCAAAGCTCT TTCTGTTTC AGTCTACAAA GCTGCAGGCA	660
CAGCATCCCA GTGTTCTGCC ATTCTTCATT TTACCATGAC ACTGATTTCT TGGGAGAAGA	720
ACTGGATATT GTTGCTGCAA AAAGTCACGA GGCCTGCCAG AAAGTGTGCA CCAATGCCGT	780
CCGCTGCCAG TTTTACCT ATACCCCAAC GCTCGAG	817

(2) INFORMATION FOR SEQ ID NO:223:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 587 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:223:

```

GAATTCGGCC AAAGAGGCCT AGGAGATACA TCATCATATC ACGGAAAGAG ATGCAGATAG      60
ATCTTTGACC ATACTTGATG AACAGTTATA CTCATTTGCG TTTTCCACCG TGCACATTAC      120
GAAGAAAAGA AATGGAGGTG GGAGTTTAAA TAACTATTCC TCCTCCATTC CATTGACTCC      180
CAGCACCAGC CAGGAGGACC TTTATTTCAG TGTTCTCTCC ACTGCCAACA CACCACGCC      240
CGTTTGCAAG CAGTCCATGG GCTGGTCCAA CCTGTTTACA TCTGAGAAAG GGAGTGACCC      300
AGACAAAGGG AGGAAAGCCC TGGAGAGTCA CGCTGACACC ATCGGGAGCG GCAGAGCCAT      360
CCCCATTAAA CAGGGCATGC TCTTAAAGCG AAGTGGGAAA TGGCTGAAGA CGTGGAAGAA      420
GAAATATGTC ACCCTGTGTT CCAATGGCGT GCTCACCTAT TATTCAAGCT TAGGTGATTA      480
TATGAAGAAT ATTCATAAAA AAGAGATTGA CCTTCGGACA TCTACCATCA AAGTCCCAGG      540
AAAGTGCCA TCCCTAGCCA CATCGGCCTG CGCACCCATC TCTCGAG      587

```

(2) INFORMATION FOR SEQ ID NO:224:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 534 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:224:

```

GAATTCGGCC AAAGAGCCTA AGTAGTTGCT GCCTTTCTTC AGATCAGGTT ACCACAATGC      60
CTCCCCGCTG CTGACGCTTC ATCCCCACA CCTCCAGCCC CAGTTACCTG GAGCTTCTCA      120
GAACCCACTT TGCCGTGCT AAAACACAAG AGGGGTGAA AGTGGCTGCC AGTAATGGCC      180
AGAAACCAAC CACCAGAGGC CAGGCTGAAA GACAAGCTCC GGGTGTCAG GGGCTGACGG      240
GCCAACCATG TGGCAGGTCC CAGGCCCCAC CCACTGCGCC ATCCGTCTCT GAGCTCCACA      300
GTGGTCCAC TAATGGGAAC CTCTCTAGG GAGAGTGATA CTGCACCTC ACCCGTAGGA      360
CTCATATTTA TAACAATGTG TAATGGCTGT AGCAAAAAGC CCTTGTTTCT AGATGTAAAT      420
GGTCAAAGAA ACAAGCGCTC TATTGTTTTC AATAAAATAG TTCAAATGAG TCCTGTATCA      480
TTGTATCTCC TATTCTGGAT TAGTGCCTTT TGGACAGTAG ACTGTAACCT CGAG      534

```

(2) INFORMATION FOR SEQ ID NO:225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:225:

```

GCTCCACTCT CTCCCTATCC ATTTGTAAGA ACAGGCTCCC CTCGCCGAAT ACAGTTGTCT      60
CAAAATCATC CTGTCTACAT TTCCCACAT AAAAATGAAA CAATGCTTTC TCCTCGAG      118

```

(2) INFORMATION FOR SEQ ID NO:226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:226:

```

GAATTCGGCC AAAGAGGCCT AAATTTAGT AGAGATGGAA TTTCACCATA TTGGCCAGGC      60
CGGTCTCAAA CTCTTGACCT CAAGTGATCT GCCCGCCTCG GCCTCCCAAA ATGTTGAGAT      120
TACAGGCGTG AGCCACCATG CCTCTCTTAC ATTCTTTTCT TCTGTTCACT ACAGCCGTGG      180
AGAGCTCCGG GTTGTCTGTC ACATGTGCAC TGCCCTCTCT TTTATGGACC TTTTAGGCTG      240
GCTGCACCCT CCGTCTGTGT CACCCTCCTG CTCCTCCTCC ACCTGGCTAG TTCCTGTTGG      300
CCACTTTTGG AAATTCATGC CAGTCCAGTC CACCCTGAGT ACATCCTCTT TCTGTGTCAC      360
TGAGCTCACT ATGCTGGGTT TTATCTATGT CTCCTTCGCA ACTAGATCAT TCACGTCTTG      420
AAGTTAGGCA TCATGCGTTC TTCATTCTG TACCTCCCAA CTCAATGCTT AGCACCAGC      480
AGGGGCTCAA GACTGTGTGT GGAATGAAGG ATTCGTGTGA AAATGCAGGG AGATGGAAGG      540
CTGAGCGTTT CTGTTCTTG ACCATTCCCG GGTGGCTCG AG                          582

```

(2) INFORMATION FOR SEQ ID NO:227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:227:

```

GAATTCGGCC AAAGAGGCCT AAAAAGTAT AAATAAGTGA GACTACTGCC CCCTAGCCTA      60
AAATTCATTG CTGCGCTCA CTCAACATCA TAGTTCTTTA GGAAGACAAG TTGTTCTATA      120
GCATAAAGAT ACAACCTATT TAGATAGTCT AAAGATTCTC CTCTGTTTCT CAAATACAGT      180
CAGTTATGCA GCTCAAAATG CCTCTCATTT TCCTGCTTTT TTTTCTTCTA CTATTGTTGC      240
CTCCAGGCTT TGCAGAAACA CATGTTATTC TCCCCCTAAA ATCTGTTCTT CTCTAGTTT      300
TCTCTCTGCC AGCAATGGCA CCACACAGTC TTTTGGTTTT GCACCAGAGA ATTAGAGATG      360
AACCCCTCAT CTCTAATCTA TCACAAGTTT CCTCAGATTT AAACCTCTCA ATCAAGATGT      420
TTCTCACCAT TTCCATTACT ATGTCCCCA GCTTTCTCGA G                          461

```

(2) INFORMATION FOR SEQ ID NO:228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:228:

```

GCCTAAACCG TCGATTGAAT TCTAGACCTA TCTCGAGAAA GAGTTGTTCT GGAAAGAAAT      60
GAAGAAAAGA GCAGAACCAA TCTCAAGCAG CCAAGTGGTG AAGTTGGATG TATGTGACCC      120
TACGTCTCTC GAG                          133

```

(2) INFORMATION FOR SEQ ID NO:229:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 482 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:229:

```
GAAAGGGATC AAAAAGAAAA AGTGATCGAA TGAATCTAC TGATACCAAA CGACAAAAGC      60
CTTCTGTCCA TTCAAGACAA CTGGTTTCTA AGCCACTGAG CTCATCTGTT AGCAATAACA      120
AAAGAATAGT TAGTACAAA GGAAGTCAG CCACAGAGTA TAAAAATGAG GAATATCAAA      180
GATCTGAAAG AAACAAGCGT CTAGATGCTG ATCGGAAAAT TCGTCTATCA AGTAGTGCCT      240
CCAGAGAACC TTATAAGAAAT CAACCTGAAA AAACCTGTGT CCGGAAAAGG GATCCTGAAA      300
GGAGGGCCAA ATCTCCTACG CCAGATGGTT CTGAGAGAAT TGGGCTTGAA GTGGATAGAC      360
GTGCAAGCAG ATCCAGCCAG TCTTCTAAGG AAGAAGTGAA CTCTGAAGAA TATGGCTCTG      420
ACCATGAGAC TGGCAGCAGT GGTCTTCTG ATGAGCAAGG GAACAACACT GAAAATCTCG      480
AG                                                                                   482
```

(2) INFORMATION FOR SEQ ID NO:230:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 501 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:230:

```
GAATTCGGCC TTCATGGCCT AGGGGATAAA TGTAAGCTTG TTAAAGTAAG CACCACACCA      60
TGTTTCTGTC TCCCAGCAC CCAGCACAGT GCTGTGAACC TTGGCAGATG CTAGATAAAT      120
GTGTGTTGAA TGAATGTGCC TATGAAGCCA CAAAGATGCC ACATGTTAGT ATATCAGTGA      180
GAGGTGACTC CACAGTGCTC TCTGGAGAAG CAATATGAGT GACTGAAGAG TGGGGCCTTT      240
TGCTTTTGCC TGGATATAGG GGTGCTCTTC TACTGTAATT GGGTGTGGAA AACTCTGGC      300
TTTATGGTAT TCCATTAGGT TCTTTTCATT TAAAGTAGTC TTAAAATCAA AGTATCCAAT      360
ATTTTAAAGC CACAAAGTAG ATTACATAAT TAGCAGAGAT TTTAGTCAGT AAAATGTTAG      420
AAATCAAAC ATAAGAAAAT TCAAGTCCTT TATTTGTGT CTTGGGTATA TGTCATTATT      480
TTAAATTCCA CAGCTCTCGA G                                                                                   501
```

(2) INFORMATION FOR SEQ ID NO:231:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 326 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:231:

```
GAATTCGGCT TCGATTGAAT TCTAGGACTT GACAGAATTC GAGTTATCCT TCTCAGAACA      60
TGTGCAGAGT CTCTTTTTCG CTCACCATGT GGTCTGTGTC TCTTTCAGGT GGGAGTTTTC      120
GGGCCTCCAG GGCAGCAGGC ACCACCTCCA TATCCCGGCC CACATCCAGC TGGACCCCTT      180
GTCATACAGC AGCCAACAAC ACCCATGTTT GTAGCTCCCC CCCAAAGACC CAGCGGCTTC      240
TTCACCTCAGA GGCCTACCTG AAATACATTG AAGGACTCAG TCGGAGTCC AACAGCATTA      300
```

GCAAGTGGGA TCAGAGCAAT CTCGAG

326

(2) INFORMATION FOR SEQ ID NO:232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:232:

```

GAATTCGGCC TTCATGGCCT AATCAGAAGC TTTTCAAAAT TCCGTCTTCA AGAAGAAACA      60
CCCGTGGAGG AAGAAGACAT TATACAAAAC AAATTTAGAA ACTGGGATCA TGAGTGGAAA      120
AACAAAGGCA AGAAGGGCTG CCATGTTTTT TAGACGTTGC TCTGAAGACG CCAGCGGTAG      180
CGCCAGTGGC AATJCTTTGT TATCAGAGGA CGAAAATCCT GATGCGAATG GGGTAACTCG      240
ATCATGGAAG ATTATTCTAA GTACAATGCT TACTGACT TTTCTTCTTG TAGGACTCCT      300
AAATCATCAG TGGCTTAAAG AAACAGATGT TCCTCAGAAA TCCAGACAAT TATATGCCAT      360
GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:233:

```

GAATTCGGCC TTCATGGCCT AAAGAAGAAT TGACACCTCT TGGAGTCCAC TTGGCACCAT      60
TACCCGTGTA GCCACATATT GGAAAAATGA TTCTTTTGG AGCACTGTTC TGCTGCTTAG      120
ACCCAGTACT CACTATTGCT GCTAGTCTCA GTTTCAAAGA TCCATTGTGC ATTCCACTGG      180
GAAAAGAAAA GATTGCAGAT GCAAGAAGAA AGGAATTGGC AAAGGATACT AGAAGTGATC      240
ACTTAACAGT TGTGAATGCG TTTGAGGGCT GGGAAGAGGC TAGGCGACGT GGTTTCAGAT      300
ACGAAAAGGA CACTCTGAG

```

(2) INFORMATION FOR SEQ ID NO:234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:234:

```

GAATTCGGCT TCATGGCCTA CGATGAGGCT GCTGTCATTT GTGGTGTGG CTCTATTTGC      60
TGCTACTCAA GCAGAGGAAG GAGCCAGGCT TTTGGCTTCC AAATCACTGC TGAACAGATA      120
CGCCGTGGAG GGACGAGACC TGACCTTGCA GTACAACATC TACAATGTTG GCTCAAGTGC      180
TGCAATGAC GTGGAATAT CTGATGATTC CTTCCCTCCA GAAGACTTTG GCATTGTGTC      240
TGGAAATGCTC AATGTCAAAT GGGACCGGAT TGCCCTGCT AGCAATGTCT CCCACACTGT      300
GGTCTGCGC CCTCTCAAGG CTGGTTATTT CAACTTCACC TCGGCAACAA TCCTCGAG      358

```

(2) INFORMATION FOR SEQ ID NO:235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:235:

```

GAATTCGGCT TCATGGCCTA GTTGACGTA ATGTATTTAT ATGTTAATTT GTTATGTATA      60
TAGATGTGCA AGTCTTGTC GAATTGGCCT CAGTGAGTTT AAAGGGCAGA AGGGGAAGAT      120
ACTGACTAGT CATAGAAATA CCTCATTCGC CTGTGGGAAG AGAAGGGAAG CCTCTTCAGG      180
GTGAGTGAAT GGCAAAGCGG TTGCTTCTGG CTCCTCCTTC CCCTGTGGTC TTGGAAGTGT      240
GTGGAAGGCA GGGACAGAGA TGGAGGCCGA GCCAATAGAC TGAAGAGACC ACAGCAATTG      300
GCTCCTCCAT CTAGAGATTT TCTTGGCAGT ATTCCATGGG ATGTTAAGCA AAGGAAACCA      360
AAGGAATCGT TTCAAATGGA CTCATGGCTT AGAAATCTTT ATTCTTAGGG CAGTCAGTAG      420
TATTCTAAAG CTTTCTGACA AGATAAAGGA AGTCACCAAA ATTTCTTTT TTAATTGTA      480
TCTAATCCTC AACAACAAAC CAAAACCTCTC GAG                                513

```

(2) INFORMATION FOR SEQ ID NO:236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:236:

```

GAATTCGGCC TTCATGGCCT ACTTGGAAT GTTTGATGCT ACTCTGAAAG ATCAGAACT      60
GAGCTTTTCAG TCGGCTCCAG GTACTACCAT GTTTCTGCAT TGGCTAGTGG GAATGGTATA      120
TGTCTTCTAC TTTGCCTCCT TCATTCTACT ACTGAGAGAG GTACTTCGAC CTGGTGTCTT      180
GTGGTTTCTA AGGAATTTGA ATGATCCAGA TTTCAATCCA GTACAGGAAA TGATCCATTT      240
GCCAATATAT AGGCATCTCC GAAGATTTAT TTTGTCTAGT ATTGTCTTTT GCTCCATTGT      300
CCTCCTGATG CTTTGGCTTC CTATACGTAT AATTAAGAGT GTGCTGCCTA ATTTTCTTCC      360
ATACAATGTC ATGCTCTACA GTGATGCTCC AGTGAGTGAA CTGTCCCTCG AG              412

```

(2) INFORMATION FOR SEQ ID NO:237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:237:

```

TTCATGGCCT AGAGATATGC TTCTTTGTAC CAATATGGAA AATCTAAAAG AAAAAACCCA      60
CACTCAGCAC TATGAATGTT ATAGGTACCA AAAACTGCAG AAAATGGGCT TTACAGATGT      120
GGGTCCAAAC AACCAGCCAG TTAGTTTCA AGAAATCTTT GAAGCCAAAA GACAAGAGTT      180
CTATGATCAA TGTCAGAGGG AAGAAGAAGA GTTGAACAG AGATTTATGC AGCGAGTCAA      240
GGAGAAAGAA GCAACATTTA AAGAAGCTGA AAAAGAGCTG CAGGACAAGT TCGAGCATCT      300

```

TAAATGATT CAACAGGAGG AGATAAGGAA GCTCGAG

337

(2) INFORMATION FOR SEQ ID NO:238:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 750 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:238:

```

GAATTCGCGC ATTTCGGTACA ACAAGAGAGA TAAACGATGA AACCGTTACA TTATACAGCT      60
TCAGCACTGG CGCTCGGACT GCGTTAATG GGAATGCAC AGGCAGTGAC GACCATTCCG      120
TTCTGGCATT CTATGGAAGG GGAAGTGGT AAAGAGGTGG ATTCTCTGGC CCAACGTTTT      180
AACGCCGAAA ACCCGGATTA CAAAATTGTA CCGACCTATA AAGGCAACTA CGAACAGAAT      240
TTAAGCGCGG GGATTGCCGC ATTTCTGACC GGCAACGCGC CGGCTATTTT GCAGGTTTAT      300
GAAGTTGGCA CCGCCACCAT GATGGCGTCG AAAGCCATTA AACCGGTGTA TGACGTGTTT      360
AAAGAGGCAG GGATTCAGTT CGATGAGTCG CAGTTTGTGC CGACGGTTTC AGGTTACTAC      420
TCCGACAGCA AAACGGGCCA CTTACTCTCC CAGCCATTCA ACAGCTCGAC CCCC GTTCTC      480
TATTACAACA AAGACGCCTT CAAGAAAGCA GGATTAGACC CGGAACAGCC GCCGAAAACC      540
TGGCAGGATC TGGCGGACTA TGCCCGGAAA CTGAAAGCCT CCGGCATGAA GTGCGGCTAC      600
GCCAGCGGCT GGCAGGGCTG GATCCAACTG GAAACTTTA GCGCCTGGAA CGGTCTGCCG      660
TTTGCCAGCA AAAACAACGG CTTTGACGGC ACGGACGCGG TGCTGGAGTT CAATAAGCCG      720
GAGCAGGTGA AACACATCGC CATGCTCGAG                                     750

```

(2) INFORMATION FOR SEQ ID NO:239:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:239:

```

GAATTCGGCC TTCATGGCCT ACTTACAGAA CCTATTCACT GGAAGGAAG CCCTCATTAT      60
AATGATTTTC ATTCTTATGT GTGTTTCAGG ACGACTGGGT TTGGATTCAG AAGAGGATTA      120
TTATACACCA CAAAAGGTGG ATGTTCCCAA GGCCTTGATT ATTGTTGCAG TTCAATGTGG      180
CTGTGATGGG ACATTCTGTG TGACCCAGTC AGGCAAAGTG CTGGCCTGTG GACTCAATGA      240
ATTCAATAAG CTGGGTCTGA ATCAGTGCAT GTCGGGAATT ATCAACCATG AAGCATACCA      300
TGAAGTTCCC TACACAACGT CCTTTACCTT GGCCAAACAG TTGTCCTTTT ATAAGATCCG      360
TACCATTGCC CCAGGCAAGA CTCACACAGC TGCTATTGAT GAGCGAGGCC GGCTGCTGAC      420
CTTTGGCTGC AACAAGTGTG GGCAGCTGGG CGTTGGGAAC TACAAGAAGC GTCTGGGAAT      480
CAACCTCGAG                                     490

```

(2) INFORMATION FOR SEQ ID NO:240:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:240:

```

GAATTCGGCC TTCATGGCCT ACTTCTGGAC TCTATAGAAC CCACTGCCTC CTGATGAAGT      60
CCCTACTGTT CACCCTTGCA GTTTTATGC TCCTGGCCCA ATTGGTCTCA GGTAAATTGGT      120
ATGTGAAAAA GTGTCTAAC GACGTTGGAA TTTGCAAGAA GAAGTGCAA CCTGAAGAGA      180
TGCATGTAAA GAATGGTTGG GCAATGTGCG GCAAACAAAG GGA CTGCTGT GTTCCAGCTG      240
ACAGACGTGC TAATTATCCT GTTTCTGTG TCCAGACAAA GACTACAAGA ATTCAACAG      300
TAACAGCAAC AACAGCAACA ACAACTTTGA TGATGACTAC TGCTTCGATG TCTTCGATGG      360
CTCCTACCCG TTTCTCCAC TGGTTGAACA TTCCAGCCTC TGTCTCCTGC TCTAGGATCC      420
TCGAG

```

(2) INFORMATION FOR SEQ ID NO:241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:241:

```

GAATTCGGCC TTCATGGCCT AACCAGAACT AATTGCTAA GTCTTTTGT TAGTCTGCA      60
AGACTGATGC TTAATACACA GTCTGTTCTC CTGTGTCTAG GTCAGGAACT CCAGTTTGCT      120
TTTCTGTTTT GTGTCCTGGT AGCAGCTGTT GAGTAACTTT CATTGGAGGT TGGGAAGGAA      180
GTGAGGAGAA AGTGTCTTG TTTAGTGTGTT TATTCCTAT AATAGGATGC TGCCTAACCC      240
AGTTCATCTC TATGTCCTGT TCACTGAATA TTCCGGGTAA TTGAAAGAAA ATATAATGGA      300
TGGGCTCCAT TAAACCAGC TCAAAAATAA ATTCTGTCA GTAAAGATTT CTTGTCAAGA      360
TGTCTGGAT TGCACCTTTG TTGAGGAAAG ACAGTGTAAG TAGTTAAAGA ATGTTGATAA      420
AATTGAAACA TTTGTTGTG GAATTGTGTG TGGTACTCGA G

```

(2) INFORMATION FOR SEQ ID NO:242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 508 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:242:

```

GAATTCGGCC TTCATGGCTT ATGGACAAGG AAGCATTCAG AGCATGGTGT CATCTGACTC      60
CACATCACCA GATTCTTCTT TAACAGAAGA ATCACGTCTT GAGACAGCCA GTAGTTTATC      120
CCAGAAGATT TGTAATGGGG GATTATCTCC TGGTAACCCA GGAGATTCTA AGGACATGAA      180
GGAAATTGAG CCAATTATG AAAGTCCCTC TAGTAATAAT CAGGATAAAG ATTCATCACA      240
GGCTTCCAAA AGCTCAATAA AAGTTCCAGA GACCCACAAA GCAGTCCTTG CTCTCCGATT      300
AGAAGAGAAA GATGGCAAGA TTGCTGTACA AACTGAGAAG GAAGAAAGTA AAGCCTCTAC      360
AGATGTTGCT GGGCAAGCAG TAACCATAAA CCTTGTCCTC ACAGAAGAGC AAGCAAAACC      420
TTACCGAGTT GTGAACCTGG AACAGCCATT GTGCAAGCCA TATACTGTCG TGGATGTGTC      480
AGCAGCCATG GCCAGTGAGC ACCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:243:

```
GAATTCGGCT TCATGGCCTA GGTTCCTGT ACATGGAGAT TAAACTGTCT TCCAAAGTGA      60
AGAGTTTATT GTTCTAGATC TTGAGCACAA AGGTTGGTAT ACGTTAATAA AAAAAATAGC      120
AAGGGAAGAA AATCATTTC TTCATACCAA GTAAGAGAGC ACTTATCATG GTAGGCACTG      180
GCTTTGCAAT TATGAGACCA GTAGTAGAAA TAGCTTAGT TTCCTCAATT TTCCTGGAGT      240
ATTCTTCAGA CTTTCTTAC ACTGCTCAAG GTGGGGCGAG TGGCAGGGCG GACCCTGGCG      300
ACCTGACGCT GCGGAGGCTC GAG                                     323
```

(2) INFORMATION FOR SEQ ID NO:244:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 396 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:244:

```
GAATTCGGCC TTCATGGCCT AGCTTCAGTA GCAAATAAGG ACATCATCTG CTATAACCTA      60
CAAGCAGTTG GACAGATATT CTACATTTC TCATTTCTCT ACACCGTCAA TTACATCTGG      120
TATTTGTACA CAGAGCTGAG GATGAAACAC ACCCAGAGTG GACAGAGCAC ATCTCCACTG      180
GTGATAGATT ATACTTGTCG AGTTGGTCAA ATGGCCTTTG TTTTCTCAAG CCTGATACCT      240
CTGCTATTGA TGACACCTGT ATTCTGTCTG GGAAATACTA GTGAATGTTT CCAAAACTTC      300
AGTCAGAGCC ACAAGTGTAT CTTGATGCAC TCACCACCAT CAGCCATGGC TGAACCTCCA      360
CCTTCTGCCA ACACATCTGT CTGTAGCACA CTCGAG                                     396
```

(2) INFORMATION FOR SEQ ID NO:245:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 370 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:245:

```
GAATTCGGCC TTCATGCTTA GCCTCAGCTC TTTCTTCTGG GTTGTGTTGTA TTTTCTTTTC      60
TGTCCTCAAAC AGTTTCCCCC ACAAAAAGAA CTTTATGTCT TTCTCTGTCT TCCCTCAGTC      120
CTTCCAGTCA GCAGCCTGTG ATTGGGCTTT TCCCTCAGA AACGAACAAT CCAGAACCCA      180
CTGTTTAAAA CAACTGTATT TTGCCTTGGG AAGTCCCATT GCCTTCCCTG AAAACATTAA      240
ACATTCTTCC GATCCCCAGC CTGAGTCTCT CTGTCTCTGG GCCCCATCCT GCTCCACAGC      300
AGGGCTGGTG TGTCCAGCAC AGAGTGACCC TCCGATGCCC TTTCCCACCC GCCGCCCTGC      360
CTCCCTCGAG                                     370
```

(2) INFORMATION FOR SEQ ID NO:246:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 367 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:246:

GAATTCGGCC	TTCATGCCTA	GAGAACTTGA	AGCTTTGCGG	CAGGAATTTA	AAAAGAAAGA	60
CAAGACGTTG	AAAGAGAATT	CCAGAAAGTT	GGAGGAAGAA	AATGAGAATC	TCCGAGCAGA	120
GCTACAGTGT	TGTTCTACAC	AACTGGAATC	CTCTCTCAAC	AAATACAACA	CCAGCCAGCA	180
AGTCATCCAA	GACTTGAATA	AAGAGATAGC	CCTTCAGAAG	GAGTCCTTAA	TGAGCCTGCA	240
GGCCAGCTG	GACAAAGCTC	TGCAGAAGGA	GAAGCACTAT	CTCCAGACTA	CCATCACCAA	300
AGAAGCCTAT	GATGCATTAT	CCCGBAAGTC	AGCCGCCTGC	CAGGATGACC	TGACACAAGC	360
CCTCGAG						367

(2) INFORMATION FOR SEQ ID NO:247:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 450 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:247:

GAATTCGGCC	TTCATGGCCT	ACGGCTTCAT	AGTAACTCTT	TGCCATATCT	CTAGCCAGCT	60
GCATAAAACG	TTCGCCATCA	GATGGAGACA	AAAGGTTTAA	AATACGCCTA	TAACCATCCA	120
TGGCCATTTT	ATGATCACCC	ATCTGTTCAT	AAAGGCTTGA	TCGCTCCAC	AGATAACGGA	180
CATTAGTAGG	TTCATATTTA	AGAGCTTTTG	TATAGCAAAA	AATAGCCTGC	TTAATATTGT	240
CTTGTTCCAG	AGACATTTCT	GCCAGTCTAA	CCCATTCTTC	TGTGTCACTG	GGATTTAAAT	300
GCGCAGCAAT	CAACTCAAAC	TGCAATGATT	TTTCCATGTC	ACCTTGGTCC	TCATATATCA	360
TGGCTAGAGT	AGAGAATGGC	TCATAAGCCA	GAGGAGCTTG	TCTTATGATT	TCCATGCACA	420
TCAATATCGC	CTCTTCACGT	TCTCCTCGAG				450

(2) INFORMATION FOR SEQ ID NO:248:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 408 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:248:

GAATTCGGCC	TTCATGGCCT	AACGAACTG	ACGTCTACCT	CATGGGGCTG	CTGTGTGGGT	60
TTGGGAGGCA	AAAATCTATG	AAGGGTTTTT	TGAAATCCCA	TAGGTGCCAC	ATCTATGAGA	120
TGTTTGATAA	ATGTGAATAT	GCTTTTACAT	TTGGGCTTAT	CTAATTTGCA	ATAAGAGAGC	180
CTCTCTCTAT	CAACACCAGC	TTCTCTCTCG	GGCTGTTTGC	TCAGGGAAGG	CAAGAAAGCC	240
ACGTGCTGGC	CCTCTGCCTT	CTCTAAAGTG	CTGTTGGAGC	ATGGAGGAGC	TGGAGGAGAT	300
GGGGATGGAC	TGACAGCTAA	GAGGGCGGCT	GCTGGGACTA	GATAGTGGAT	GAAGAAAGAA	360
GGACGAGGAA	GCCGTGGGGC	AGCCTCTTCA	CATGGGGACG	AACTCGAG		408

(2) INFORMATION FOR SEQ ID NO:249:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 562 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:249:

```

GCCCATGACA GAGAGCAGTG CCAAAGACAT GGCGTACGAA CATCTGATAG ATGACTTATT      60
GGCTGCTCAG AAGGAAATTC TGTCTCAGCA GGAAGTCATC ATGAAGTTAA GGAAAGACCT      120
TACCGAAGCC CACAGCAGAA TGTCGGATTG GAGAGGGGAG CTAAACGAGA AGCAGAAGAT      180
GGAAGTGGAG CAGAACGTGG TGCTGGTCCA GCAGCAGAGC AAGGAGCTGA GTGTGCTCAA      240
GGAGAAGATG GCCCAGATGA GCAGCCTGGT AGAAAAGAAA GATCGGGAGC TGAAGGCCCT      300
TGAGGAGGCA CTCAGGGCTT CCCAAGAGAA ACACAGACTC CAGCTGAACA CAGAGAAGGA      360
ACAGAAGCCC CGGAAGAAGA CCCAGACGTG TGACACCTCT GTGCAGATAG AACCCGTCCA      420
CACTGAGGCC TTCTCCAGCA GCCAAGAGCA GCAATCCTTC AGCGATCTAG GGGTCAGGTG      480
CAAAGGGTCC CGGCACGAGG AGGTCATTCA GCGTCAGAAA AAGGCCTTAT CTGAACCTCG      540
AGCGCGAATT AAAGAACTCG AG
  
```

(2) INFORMATION FOR SEQ ID NO:250:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 313 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:250:

```

GAATTCGGCC TTCATGGCCT ACCCAAACAG ACAGAAAACG CCACGAGGCA AGTGTAGTCT      60
CTCAGAGCCT GGACCCTCTG TCAGCAGTCC ACATAGCAGG TCCACAAAAG GTGGCTCCGA      120
TTCCTCCCTT TCTGAGCCAG GGCCAGGTCG GTCCGGCCGC GGCTTCCTGT TCAGAGTCCT      180
CCGAGCAGCT CTTCCCTTC AGCTTCTCCT GTCCTCCTC ATCGGCTTG CCTGCCTTGT      240
ACCAATGTCA GAGGAAGACT ACAGCTGTGC CCTCTCCAAC AACTTTGCCC GGTCATTCCA      300
CCCTATGCTC GAG
  
```

(2) INFORMATION FOR SEQ ID NO:251:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 291 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:251:

```

GTCTTGACAA AACCTAACTT GCGCAGAAAA CAAGATGAGA TTGGCATGGC TTTATTTGTT      60
TTTTTTGTTT TGTTTTGGTT TTTTTTTTTT TTTTGGCTTG ACTCAGGAGA TCCTTCCCGG      120
GGGCTCCCGC CGGCTTCTCC GGGATCGGTC GCGTTACCGC ACTGGACGCC TCGCGGCGCC      180
CATTTCCGCC ACTCCGATT CGGGGATCTG AACCCGACTC CTTTCGATC GGCCGAGGGC      240
AACGAGGGCC ATCGCCCGTC CCTTCGGAAC GGCGCTCGCC CAACTCTCGA G
  
```

(2) INFORMATION FOR SEQ ID NO:252:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:252:

```

CGGGAAATGA AGCGGAAGCA GCGGGAGTCC GAGAGGCCCA TCTTGCCAGC CAATCAGAAG      60
CTCATTACTT TATCAGTGCA AGATGCACCC ACAAAGAAAG AGTTTGTAT TAACCCCAAC      120
GGGAAATCCG AGGTCTGCAT CCTGCACGAG TACATGCAGC GTGTCCTCAA GGTCCGCCCT      180
GTCTATAATT TCTTTGAATG TGAGAACCCA AGTGAGCCTT TTGGTGCCTC GGTGACCATT      240
GATGGTGTGA CTTACGGATC TGGAAGTCA AGCAGCAAAA AACTTGCAGG GAATAAAGCT      300
GCCCAGAGTA CACTGGAAAT CCTCATCCCT GACTTTGTTA AACAGACCTC TGAAGAGAAG      360
CCCAAGACA GTGAAGAACT CGAG                                         384

```

(2) INFORMATION FOR SEQ ID NO:253:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:253:

```

GGGACGTTGG TGTTGAGGTT GGCATACGTA TCAAGGACAG TAACTACCAT GGCTCCCGAA      60
GTTTTCGCAA AACCTCGGAT GCGTGCCCTT CTGGCCAGGC GTCTGCGAAA TCATATGGCT      120
GTAGCATTCT TGCTATCCCT GGGGGTTGCA GCTTTGTATA AGTTTCGTGT GGCTGATCAA      180
AGAAAGAAGG CATACGCAGA TTTCTACAGA AACTATGATG TCATGAAAGA TTTGAGGAG      240
ATGAGGAAGG CTGGTATCTT TCAGAGTGTA CTCGAG                                         276

```

(2) INFORMATION FOR SEQ ID NO:254:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:254:

```

GAGTTTGTG GGCTTACCTT ATTTTAATTA AAAAGAAGTC GGGGCTACCA GGGGTTTCAG      60
ACGTGCTCGA TGGACACGTG ATTGTAAAC AGCCAAGATT CTGGGGGACG GGGGGGTGCC      120
TCGGTGGGGT TGACATTTGA GTTACAGGGA CTTAATAATG GCCAGCCTTT CACATCCCAT      180
GGGAAACCGC CCCCCGGGC CTTGGAGAAT GGGGGTCCAA GTGCCTATCC CCCTTTGGAT      240
GTAAAATTCA TCGTTAGTAA ACATCATCCG CCCAGCAACA AGCAAAGCAC ATCGCAAGAT      300
TAAACAAAG AATCCGCCGT GAACAGAAGG CCTCCATCTC TGCTCTCAGG CAGGTGTCCT      360
TCAGGGAGGA GCCTCAGGCA GCTGTTCTAA CCCTGCTGCC AACGCCTGGG CTGTTTCTGC      420
CGACAATCTT CTATTTCTCT AAAAGAGTAC GCTGAACAGC TGGCTCTGCG TTGATTGAAT      480
TCTAGACCTG CCTCGAG                                         497

```

(2) INFORMATION FOR SEQ ID NO:255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:255:

```

GAATTCGGCC TTCATGGCCT AGAGAACCGT TGCTTTTCCG AGTTGCTCTT CTTCCAGGCT      60
CCGTTGGTGG TCGGCATGGC CCGTGGAAAT CAACGAGAAC TTGCCCGCCA GAAAAACATG      120
AAGAAAACCC AGGAAATTAG CAAGGGAAAG AGGAAAGAGG ATAGCTTGAC TGCCTCTCAG      180
AGAAAGCAGA GGGACTCTGA GATCATGCAA GAAAAGCAGA AGGCAGCTAA TGAGAAGAAG      240
TCTATGCAGA CAAGAGAAAA GTGATGACTG GCTATTTGGA AAACCTGGGT GCTACTGCCA      300
ACTGGGTGTA TCATAAGCTC TAAGATCAAG ATTTTGTAGA GTGGACAGTC ATTACATATG      360
TTATAACTTA TCCTTTAAAA ACTATTTTAA ACTTTATCCT TTCAGCTTTA CTTAGTGCGA      420
TGTTTTAGAA GCAGTCTTCA AAGAATAAAA CACTAACCAT GCTGCTCGAG      470

```

(2) INFORMATION FOR SEQ ID NO:256:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:256:

```

GAATTCGGCC TTCATGGCCT AATTTTGTAT TTTTAGTGGA GACGGGGTTT CTCCATGTTG      60
GTCAAGCTGG TCTTGAATC CCAACCTCGG GTGATCCGCC CGCCTTGGCC TCCCAAAGTG      120
CTGGGATTAC AGGCGTGAGC CACCGCGCCT GGCCAGTAGT TTCTTAACAT TAAATTATCC      180
GCAAATGGA AGAAATACTA GAGGTCTGTG AGGATGTTTC TTCTCTTTCA GTCTGTTGTG      240
GTGGTTTGTA GTTTACAGGG GCTTGGGTAA CTGGATTTT AGGTTTATTA TTTTAAATAG      300
TAGACTCAAC ACTATTTTGT ATTGCAGTAG AGATCACTTA TGCAGATCTT TTTAATACCA      360
TTTCATAGAG ATTAAGGGTC ACCTCGAG      388

```

(2) INFORMATION FOR SEQ ID NO:257:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:257:

```

GAAACAGGGC TCAAAGAAGT GGTAAGTCT GTGGAGGAAA TGACAAGTAA AGGAAAACCA      60
GGACAAGAAG TCTTGGAAGA CGACCAGGAA AATACTTTAA AATATGAGTA TGAAGAAGAC      120
TTTGAAGTAG ATGAGGAGAA ACAAGGTGAA AAATCTAATG AAGAAGGACA GGCTGATGTT      180
CAAATGAATG GAATACCGCA GTCACCTTTG GATGATAAAA AAGATAATTT AGACCCTGAA      240
AAAGAGAGTG AAACCTCATC ACAGAAGGCA CCAGATGCCC GTGACAATGT GAAAGATGAG      300
AATGATGGAT GCTCTGAGAG TGAACGTCTC GAG      333

```

(2) INFORMATION FOR SEQ ID NO:258:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:258:

```

CACAGTGCTG GNTCACAACA AGATGNTCNA GGTGTCAGCC GTACTGTGTG TGTGTGCAGC      60
CGCTTGGTGC AGTCAGTCTC TCGCAGCTGC CGCGGCGGTG GCTGCAGCCG GGGGGCGGTG      120
GGACGGCGGT AATTTTCTGG ATGATAAACA ATGGCTCACC ACAATCTCTC AGTATGACAA      180
GGAAGTCGGA CAGTGAACA AATTCCGAGA CGATGATTAT TTCCGCACTT GGAGTCCAGG      240
AAAACCTTTC GATCAGGCTT TAGATCCAGC TAAGGATCCA TGCTTAAAGA TGAAATGTAG      300
TCGCCATAAA GTATGCATTG CTCAAGATTG TCAGACTGCA GTCTGCATTA GTCACCGGAG      360
GCTTACACAC AGGATGAAAG AAGCAGGAGT AGACCATAGG CAGTGGAGGG GTCCCATATT      420
ATCCACCTGC AAGCAGTGCC CAGTGGTCTA TCCCAGCCCT GTTTGTGGTT CAGATGGTCA      480
TACCTACTCT TTTCAGTGCA AACTAGAATA TCAGGCATGT GTCTTAGGAA AACAGAATCT      540
CGAG                                         544

```

(2) INFORMATION FOR SEQ ID NO:259:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:259:

```

GAATTCGGCC TTCATGGCCT ACATCAGCAT CCCTGGGAGC ATCAGAAATG CAGAGCTCAG      60
GCCCCCCCCG GAGCTACCGA ATCAGAACCT ACATTTTACA CACCCCTCAG CTCAGAGCTT      120
GTTTCTCCCT GGATTCCATG GCCCTGTGCT GCTGGCAGCC CGGGGTTAGG GCATTTCTGT      180
GTCACCTGGC GACGGTGAAG CCTAGTTTCC TCCAGAGAGA TTATGCTGCT CTCCATCCAA      240
GTGAAGTGGC AATGGTGCCA GCCTGAGATT TCTGCCCTGA GTTTTAAGTA CGAGAGTGTG      300
GGCTGACAAT AAATCCTTT ATTCTACCCT CTTCTGTTCT CATAAGGAGA AATTTAAATT      360
CTGGAAGAGA TGAAGCTTGC ATTTACCCAA GAC                                         393

```

(2) INFORMATION FOR SEQ ID NO:260:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 705 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:260:

```

GAATTCGGCC AAAGAGGCCT AAGGGATTGT TATTCCTTTA AAAAAAACC AATACCAAAG      60
AAGCCTACAA TGTGGCCTT AGCCAAAATT CTGTTGATT CAACGTTGTT TTATTCATT      120
CTATCGGGGA GCCATGGAAA AGAAAATCAA GACATAACA CAACACAGAA CATTGCAGAA      180
GTTTTTAAAA CAATGGAAAA TAAACCTATT TCTTTGAAA GTGAAGCAAA CTTAAACTCA      240
GATAAAGAAA ATATAACCAC CTCAAATCTC AAGGCGAGTC ATCCCCTCC TTTGAATCTA      300
CCCAACAACA GCCACGGAAT AACAGATTTC TCCAGTAACT CATCAGCAGA GCATTCTTTG      360

```

```

GGCAGTCTAA AACCCACATC TACCATTTCC ACAAGCCCTC CCTTGATCCA TAGCTTTGTT      420
TCTAAAGTGC CTTGGAATGC ACCTATAGCA GATGAAGATC TTTTGCCCAT CTCAGCACAT      480
CCCAATGCTA CACCTGCTCT GTCTTCAGAA AACTTCACTT GGTCTTTGGT CAATGACACC      540
GTGAAAATC GTGATAACAG TTCCATTACA GTTAGCATCC TCTCTTCAGA ACCAACTTCT      600
CCATCTGTGA CCCCCTTGAT AGTGAACCA AGTGGATGGC TTACCACAAA CAGTGATAGC      660
TTCCTGCGGT TTACCCCTTA TCAAGAAAAA ACAACTCTAC CTACC                          705

```

(2) INFORMATION FOR SEQ ID NO:261:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 729 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:261:

```

GAATTCGGCC AAAGAGGCCT ACCTTACTTG AGTCCACAGG CAAGGCCCAA TAATGCATAT      60
ACTGCCATGT CAGATTCCTA CTTACCCAGT TACTACAGTC CCTCCATTGG CTCTCCTAT      120
TCTTTGGGTG AAGCTGCTTG GTCTACGGGG GGTGACACAG CCATGCCCTA CTTAACTTCT      180
TATGGACAGC TGAGCAACGG AGAGCCCCAC TTCCTACCAG ATGCAATGTT TGGGCAACCA      240
GGAGCCCTAG GTAGCACTCC ATTTCTTGGT CAGCATGGTT TTAATTTCTT TCCCAGTGGG      300
ATTGACTTCT CAGCATGGGG AAATAACAGT TCTCAGGGAC AGTCTACTCA GAGCTCTGGA      360
TATAGTAGCA ATTATGCTTA TGCACCTAGC TCCTTAGGTG GAGCCATGAT TGATGGACAG      420
TCAGCTTTTG CCAATGAGAC CCTCAATAAG GCTCCTGGCA TGAATACTAT AGACCAAGGG      480
ATGGCAGCAC TGAAGTTGGG TAGCACAGAA GTTGCAAGCA ATGTTCCAAA AGTTGTAGGT      540
TCTGCTGTTG GTAGCGGGTC CATTACTAGT AACATCGTGG CTTCCAATAG TTGCGCTCCA      600
GCCACCATTG CTCCTCCAAA ACCAGCATCT TGGGCTGATA TTGCTAGCAA GCCTGCAAAA      660
CAGCAACCTA AACTGAAGAC CAAGAATGGC ATTGCAGGGT CAAGTCTTCC GCCACCCCA      720
ACACTCGAG                                     729

```

(2) INFORMATION FOR SEQ ID NO:262:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 686 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:262:

```

GAATTCGGCC AAAGAGGCCT ACTACCATGT CCTCTTGGAG CAGACAGCGA CCAAAAAGCC      60
CAGGGGGCAT TCAACCCCAT GTTCTAGAA CTCTGTTCCCT GCTGCTGCTG TTGGCAGCCT      120
CAGCCTGGGG GGTCAACCTG AGCCCCAAG ACTGCCAGGT GTTCCGCTCA GACCATGGCA      180
GCTCCATCTC CTGTCAACCA CCGCCGAAA TCCCCGGCTA CCTGCCAGC GACACCGTGC      240
ACCTGGCCGT GGAATTCTTC AACCTGACCC ACCTGCCAGC CAACCTCCTC CAGGGCGCCT      300
CTAAGCTCCA AGAATTGCAC CTCTCCAGCA ATGGGCTGGA AAGCCTCTCG CCCGAATTCC      360
TGCGGCCAGT GCCGCAGCTG AGGGTGCTGG ATCTAACCCG AAACGCCCTG ACCGGGCTGC      420
CCTCGGGCCT CTTCAGGGCC TCAGCCACCC TGGACACCCT GGTATTGAAA GAAAACCAGC      480
TGGAGGTCTC GGAGGTCTCG TGGCTACACG GCCTGAAAGC TCTGGGGCAT CTGGACCTGT      540
CTGGGAACCG CCTCGGAAA CTGCCCCCG GGCTGCTGGC CAACTTCACC CTCCTGCGCA      600
CCCTTGACCT TGGGGAGAAC CAGTTGGAGA CCTTGCCACC TGACCTCCTG AGGGGTCCGC      660
TGCAATTAGA ACGGCACATT CTCGAG                                     686

```

(2) INFORMATION FOR SEQ ID NO:263:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:263:

```

GAATTCGGCC AAAGAGGCCT AGGAGAGAGG AGGTGCTGCA AGACTCTCTG GTAGAAAAAT      60
GAAGAGGGTC CTGGTACTAC TGCTTGCTGT GGCATTTGGA CATGCTTTAG AGAGAGGCCG      120
GGATTATGAA AAGAATAAAG TCTGCAAGGA ATTCTCCCAT CTGGGAAAAG AGGACTTCAC      180
ATCTCTGTCA CTAGTCCTGT ACAGTAGAAA ATTTCCCACT GGCACGTTTG AACAGGTCAG      240
CCAACTTGTG AAGGAAGTTG TCTCCTTGAC CGAAGCCTGC TGTGCGGAAG GGGCTGACCC      300
TGACTGTTAT GACACCAGGA CCTCAGCACT GTCTGCCAAG TCCTGTGAAA GTAATTCTCC      360
ATTCCCCGTT CACCCAGGCA CTGCTGAGTG CTGCACCAA GAGGGCCTGG AACGAAAGCT      420
CTGCATGGCT GCTCTGAAAC ACCAGCCACA GGAATTCCTT ACCTACGTGG AACCCACAAA      480
TGATGAAATC TGTGAGGCGT TCAGGAAAGA TCCAAAGGAA TATGCTAATC AATTATGTG      540
GGAATATTCC ACTAATTACG GACAGCTCGA G                                     571

```

(2) INFORMATION FOR SEQ ID NO:264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:264:

```

GAATTCGGCC AAAGAGGCCT ACCAAGCAAG AACAGCTAAA ATGAAAGCCA TCATTATCTT      60
TACTCTTCTT GCTCTCCTTT CTGTAAACAC AGTCACCAAC CAAGGCAACT CAGCTGATGC      120
TGTAACAACC ACAGAACTG CGACTAGTGG TCCTACAGTA GCTGCAGCTG ATACCACTGA      180
AACTAATTTT CCTGAACTG CTAGCACCAC AGCAAATACA CCTTCTTTCC CAACAGCTAC      240
TTCACCTGCT CCCCCATAA TTAGTACACA TAGTTCCTCC ACAATTCCTA CACCTGCTCC      300
CCCCATACTC GAG                                     313

```

(2) INFORMATION FOR SEQ ID NO:265:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:265:

```

GAATTCGGCC TTCATGCCTA GCCTCTGAGT TCAGCTCAGA ACACAGATGA TCTCATTGAT      60
TCCTCACGTC AACCTTGGGA AATCTGGGTA CCCTGGGACG TCCACACATG AGGACCGAGG      120
CTCAGGGACA TCAAGGGACT GGCCTGGTCC CAGAAAACAGG GAGTAAAATG GGAAGTAAAC      180
TCAGTCCAC GTCTGCCTGA CTCCAGAGTT TGGGCCACTG AACCATGCGG CTGCCATCTT      240
GGAGTTCTTT GAGCTGTGAA GTGCTGTGCA TCGTGTGATT CTGTGTCCCT TTTGTGCAGG      300
TACCAGGATT TCTATGCATT CGACCTGTCA GGAGCCACTC GAG                                     343

```

(2) INFORMATION FOR SEQ ID NO:266:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:266:

```

GAATTCGGCC TTCATGGCCT ACAGGAAGCA CAGAAAGACA AAATTGGAAA TGTCTAGTTC      60
CATGTTGATG CCTTCAGAAG ATGCAGGTGA ACAAAGAGAG GCCGGGAAAT CAGAGCTAGT      120
TGAAACCCAA CATGTTACCT TAGAGCCAGA GCTACCACTG ACTTCTCTAA GCACAGTCAA      180
ATCCCAGGAT TATGCTGAAA CAGAGCAGGA GGTCAATTTA CAAGCTATAG AGGCCATGGA      240
GGCCACAGAA GCCCTGGAGG CCACAGACGC CATGGAAGCC ATAGATCAAG GTAGCATGAA      300
AGATTATGGA GATGTTGATCT CTAAGCTGGA AAGACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:267:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:267:

```

GAATTCGGCC TTCATGGCCT AGGCACCCCT AGGCGACTCA GGGTTCGGGG AGGAGGAGAC      60
CAGACGGGGC CTGCGTGGC ATGGCCTCTT CACAGGGCTG CCGTGAAGAA ACTTCGTGAC      120
AGCGGCGGAG AGGTGGCCCA GGAGTGAGAC AAGCAGGCCC CGGGCCTTGG ACTCAGACAT      180
GCTGGGTCCG GTCAGGCCCC TGTGGGAACC AGTGTTTTAG GGACTGGGTA CTCTCTTAGA      240
GAAGAACTGA TGCTAAAGAG TCAGGAAGAC ACGAGCGGGC CAAATAAAG AGGAAGAGAG      300
GCCCTCAGGA CATCATGGCA CTTACTGCTT GGATTGTGCT CCCCCTCCAG AATTCTGTGG      360
ACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:268:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:268:

```

GAATTCGGCC TTCATGGCCT ACTTGGGAAT TAACATCTTC GATAAATCCC AGAAGTCTTT      60
AAGTGACAGT AGAGAGCCTA CAGAGAAGCC TGGGAAAGCA GAAAAATCTA AGAGCCCAGA      120
AAAAGTGTCA TCGTTCTCAA ACTCCTCCTC CAACAAGGAA TCAAAAAGTAA ACAATGAGAA      180
GTTTCGTACT AAGAGCCCCA AGCCTGCCGA AAGCCCCCAG TCAGCCACTA AGCAGTTGGA      240
TCAGCCCCT GCTGCTTATG AGTATTATGA TGCTGGCAAT CACTGGTGCA AAGACTGCAA      300
CACCATCTGT GGGACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:269:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 542 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:269:

```
GAATTCGGCC AAAGAGGCCT AGGGATATTT ACTGAGGGCC TACAGGGTGC CCAATACTGA      60
GCTAGCTAGG CTCAGGGACC TGTACACACA TGCATTCTCC ATTAGGGTTC TGCAATCCTG      120
ACACTATTAC TATCCTCAAG GACTCTGCGC ATCCAGACCC GTCTATTAGT TAGCAATGAG      180
AACCCCTGCC ATGGCCAAGT TACACAAGAA CACCCTTGCC CTACCTCTGC CCCCTGCNGA      240
TCTGAAAGTA ACCTGGTCTG AAAGAGAAGT AAAGATGTGG CTGTCCCTGG GTGCTAGGGA      300
GAGAGGCCTG TTGACAAAGC CACCAGCTGT CTCCAGTCAG AGCCAGGGAG ACAGGCTTCT      360
CCCTGCACCA TCCGCACTGC CATAGACACA GCAGCCAGCA ACAGCACTG GACCATTACG      420
GAGTTCAGG CCCAGTCTCC AACTGACCTC CCTCCTGCTC CAGCTGCCCA TGCTAACAAAG      480
AGCCAGGGCA CAAGACCTCA CTTGGAACAA GTACCAGGCA GAAGAGAGCA TNACCNGCCG      540
GT                                                                                   542
```

(2) INFORMATION FOR SEQ ID NO:270:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 613 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:270:

```
GAATTCGGCC AAAGAGCCTA GTCGATTGAA TTCTAGACCT GCCTCCTTTT CCACTTGAAT      60
TGTTAAATG TTTACTCCAG CATCTTTAAG TATTCCTGTA ACCTGCTGTA CTATTCTTTG      120
TTCTAGCACA TCAGATGTCA CCTGTATATG AATTGTTTCT GCCACAATAC TAGCAGAATG      180
ACGCCAAAAA TGTGGGTCTC GGTATGATAT TAATCCTTCA ATTTTCTGTA TCTTTTCTAA      240
AGCAATATGT AGTTCTTTT CATATTCTGG TGGCAATCTC AGGAGTAGAA CCTGGCAGGC      300
ATCTTTAATC AGTGAACAA CACTGAGAAA TATTAATATA GCAATAAAAA GAGAACAGAG      360
TGGGTCAGCG ATGAACCATC CAACTGCTC TATAAGAACT GTGGATACGA TCACACCAAT      420
GCTGCCAAGA GTATCTGCCA AAACATGTAG AAATACACCC CTCATGTTAG CATTCATGCC      480
TCCACCCGCA GATCCGTGGC TGTGACCATG CCCATGGTCA CTGTGTCCAT GCATATGATG      540
TGAATGGCTG TGATCAGATG AGTGACAGCT TCCTTGAGCC TAAACCGTCG ATTGAATTCT      600
AGACTGCCTC GAG                                                                                   613
```

(2) INFORMATION FOR SEQ ID NO:271:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 763 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:271:

```
GAATTCGGCC AAAGAGGCCT AGTCTGGTTC TTGCTTGATC TGAGAGCTTC CATCAGTCTC      60
TTTTATTCT TCTGTGGCTG GAACTTCCAA CTGGCTTGGT TCAGCTGATT CTTGTATCAC      120
```

```

GGGGCCTTCT GACTCACTCT GATCAACCAG CTGGTTATTA ATCACAAGTC CTGGAAATGG      180
TCTAATGACC GTGAATTTGA TAAACTCGGC AGAGTCTAAG ATCCTTCTCA TGGAGCTGAT      240
TTCCAGGTAG CTGGGGGCTT TGAAAGGACA CCCC CGGGG CATGCCATCA ACTACCACAC      300
AGCCAGGGTT AATTGTGATT TCCTGTAGG GAACTTTCAC AGGAAAACCC ATACCAATAG      360
CTTCACCAAA TTTCCGACTA AAGAGGTCAT TCACTTGTTT TCTTAGCTGT CTAGCTTTT      420
CAACTTTTCA GAGTCTTTCA TTATCATCAT CTGGAATTGT CACCTGAATG ATGTTAAGGT      480
CTTCAACACC TGATGCAGTA GTATTAACAT TGGGTGATGA ATTTATTTT CTGGGAGGGC      540
TCTTAGAGGA GGTGCTCTCC TTAATCGCCG TCTCAAACAT TTCGGGCTTT TTAATGATGA      600
ACTTAATTTT GGCTTTGTTT CTGAGTATCT TCTCCAGCCT CGGAATGCCA AAAGTCGATG      660
GTCTTCGGAA TGGCACACCC TCAGGTAAGC CTTCACATA AAAGTCTTCC GGGAAAGACT      720
CAAATAACGC GAACGGCACC TTCACAGCTT GTTTAAGGCC AAG                        763

```

(2) INFORMATION FOR SEQ ID NO:272:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:272:

```

GAATTCGGCC AAAGAGGCCT AATTAAGGAA ATACTTTGCA TAAATTAATC AGCCCCACAG      60
TATTCCTTA ATAAGAATAA AATGAATTTA AACTGATTC TG                        102

```

(2) INFORMATION FOR SEQ ID NO:273:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:273:

```

GAATTCGGCC AAANAGGCCT ACNCCAGTCA AGGAAAGTCA AGTNGCAAGA AGGAANTGTC      60
TAAAAGAGAT GGCAAGGAGA AAAAAGACAG AGGAGTGACG AGGTTTCAGG AAAATGCCAG      120
TGAAGGGAAG GCCCCTGCAG AANACGTCTT TAAGAAGCCC CTGCCTCCTA CTGTGAAGAA      180
GGAAGAGAGT CCCCCTCCAC CTAAAGTGGT AAACCCACTG ATCGGCCTCT TGGGTGAATA      240
TGGAGGAGAC AGTGACTATG AGGAGGAAGA AGAGGAGGAA CAGACCCCTC CCCCACAGCC      300
CCGCACAGCA CAGCCCCAGA AGCGAGAGGA GCAAACCAAG AAGGAGAATG AAGAAGACAA      360
ACTCACTGAC TGAATAAAC TGGCTTGTCT GCTTTGCAGA AGGCAGTTTC CCAATAAAGA      420
AGTTCTGATC AAACACCAGC AGCTGTCAGA CCTGCACAAG CAAAACCTGG AAATCCACCG      480
GAAGATAAAA CAGTCTGAGC AGGAGCTAGC CTATCTGGAA AGGAGAGAAC GAGAGGGAAA      540
GTTTAAAGGA ATAGGAAATC TCGAG                        565

```

(2) INFORMATION FOR SEQ ID NO:274:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 188 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:274:

GAATTCGGCC AAAGAGGCCT ACTTAAATCA AGGCCAAAAC TAAGGATTTA GGTAGAGTGT	60
ATTAGCCTTT CAATACCTGC TTATTAAACA GTTGTTTTCA TACTTTTCAA AGGTGTGTAG	120
AAGTTTTGTA AATAAATTTT CTGATAGGAT AAAGTAGATT CCCTATGATC TCTTATTAT	180
TTATCATT	188

(2) INFORMATION FOR SEQ ID NO:275:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:275:

GAATTCGGCC AAAGAGGCCT AGTCCGTGAT GCGTACACAC CTGTGAGCA CGAGCTCCTC	60
TAGGCGGTGC AGGTGCGAGG CCACGTACTC CAGCGCCATG TCGGTGATNC GTGGGCACCA	120
CGAGAGGTCA AGGNTGCGCA GCTTGCGCAG GTTCTCGGCC ACGAGCTCCA CGCCGTCGTC	180
GGTGACCTTG GAGCAGCCCG AGAGGCTGAA CGCGGTGAGG TTGGGCAGGN TGTGCACCAC	240
GTGACCACG CCGTGGTTGG TGATCTCCA GCAGGAGAGC AGGCGCAGCG TGTGCGTGT	300
GTGGCCCTGG CGCGCCGTGA AGTAGGCCAG CGCCGTGTCC GTCACGTGGT AGGCCTGCAG	360
GCTCAGCTCC GCCAGGTTGG GCAGCAGCTG CGAGATGGCC GCGATGGCGT CGTCGGCCAC	420
GTTGATGCAG TCACTCACGC TCAGCGAGGT GATGCGCGCG CTCAGGCTGG ACCACAGCCC	480
GGCCTCGGTG AAGTCGTTGC AGCCCGACAG CTCCAGACGC ACCACGCCCT GCATCTGTTC	540
AAGCATAACC TCGAG	555

(2) INFORMATION FOR SEQ ID NO:276:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:276:

GAATTCGGCC AAAGAGGCCT ACAGTGAATA ATCAGAAGTC AGTTTGGGAG AAGTCAAAAT	60
GGACACAATC TTCTTGTTGA GTCTTCTATT GCTGTTTTTT GGAAGTCAAG CCTCAAGATG	120
CTCAGCTCAA AAAAATACCG AATTGTCAGT GGATCTTTAT CAAGAGGTTT CCTTATCTCA	180
TAAGGACAAC ATTATATTTT CACCCCTTGG AATAACTTTG GTTCTTGAGA TGGTACAAC	240
GGGAGCCAAA GGAAAAGCAC AGCAGCAGAT AAGACAACT TTAACAAC AGGAAACCTC	300
AGCTGGGGAA GAATTTTTTG TACTGAAGTC ATTTTCTCT GCCATCTCAG AGAAAAACA	360
AGAATTTACA TTTAATCTTG CCAATGCCCT CTACCTTCAA GAAGGATTCA CTGTGAAAGA	420
ACAGTATCTC CATGGCAACA AGGAATTTTT TCAGAGTGCT ATAAACTGG TGGATTTTCA	480
AGATACAAGG CTCGAG	496

(2) INFORMATION FOR SEQ ID NO:277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:277:

```

GAATTCGGCC AAAGAGGCCT ACACCCAGAG ACTGTAATTT GTGTAGTTTT TCTTTTAA      60
CTTAAAGACA ACTTTAAAAA ATACTTACAT TAATGTTTTT TATATTCATA GGTGGGTATA      120
TTCGCCTCAT TCAAATGGCA GTAGCCTTGG CTCACATAAG ACATGTTTCA TGTGATCTGT      180
ATCCTGGCAT ACCAGTTATA TTTTGTGGGG ACTTTAATAG TACACCATCA ACAGGAATGT      240
ATCATTTTGT CATCAATGGC AGCATTCCAG AGGATCATGA AGACTGGGCT TCCAATGGGG      300
AGGAGGAAAG ATGCAATATG TCTCTTACAC ATTTCTTCAA GCTGAAAAGT GCTTGTTGGTG      360
AACCTGCTTA CACAAATTAT GTTGGTGGCT TTCATGGATG TCTAGATTAC ATTTTCATTG      420
ACTTAAATGC TTTAGAGGTT GAACAGGTGA TTCCATTACC TAGTCATGAA GAAGTTACCA      480
CTCCACTCGA G                                     491

```

(2) INFORMATION FOR SEQ ID NO:278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:278:

```

GAATTCGGCC AAAGAGGCCT ACAGAGAACA GATAAAAATA AGCCTGTGGA ATGACCACTT      60
TGTGGAATAC GGCAGAACCG TGTGTATGTT TCGCACAGAG AAGATTCGGA AGCTCGTAGC      120
CATGGGCATC CCTGAATCTT TGCGAGGGAG ACTCTGGCTT CTCTTCTCAG ATGCGGTGAC      180
GGATCTTGCC TCACACCCTG GTTACTACGG GAATCTGGTG GAGGAGTCCC TGGGGAAATG      240
CTGCCTGGTA ACCGAGGAGA TAGAACGAGA CCTGCACCGC TCCCTGCCAG AGCACCCCGC      300
CTTCCAGAAC GAAACGGGAA TTGCTGCTTT GAGGAGAGTC TTGACGGCCT ATGCCACCG      360
GAGCTCGAG                                     369

```

(2) INFORMATION FOR SEQ ID NO:279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:279:

```

GAATTCGGCC AAAGAGGCCT ACTCTCCCTT TCCACTCCCT GGTGTTCCCA GGAGTGAGAT      60
GAGGGTGGAG GGGCCCAGCA CAGCACCTTC AACCTCAGGA TGAGAGAGGC CTTTTCACAA      120
AACTCTAAGG CAGGGGAACA GGAAACAGAG AAAGCCGGAG AACCCAGGA GGGCCCCAAG      180
AGCGGATTCT GGTGATTATT AATGTGCTTG CCCAATGAAG AAAGAATACT GGCCTCTCT      240
AGGTATGATG AGAGCAGACA GCAAACGTGG GGCCTGTCTA CAGTGATTCT CTACCCCAAT      300
GTATGGTCAT CCACGTTAGA AGCAGCAGTG AAAGGCGTGT TGCTTTTCAT TATTAACCTC      360
AAATCCCAGT CCCTAAACCA GCTCTTGACG CCCCTCTGTC AGGTGCTAAT CCTGGAAACT      420
GGAGGCCACC TGGTCTCCAC TTAGGTGAG GAAAACCTGG GAGAAGCCAT CAGACTGCAC      480
CTGTGGCATG AGATGCTTTG AGACAGGTCA AGAGGAGGAG CTCTCGAG      528

```

(2) INFORMATION FOR SEQ ID NO:280:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 323 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:280:

```
GAATTCGGCC AAAGAGGCCT ACAGTGTCGG AGTAGATTG AACTGGAGG TGAAGGTAGG      60
AGTAAGTGAT AGATTTTAGA ATTAGTGCTC AGAGCTGAAA TATCCAGTCC GTGAAGTTAG      120
AGGCCAGCCT TCATACCACT GTGATGACAG GAACTACCTT AATCTTTTCT GTCCTTTTCT      180
CTCTGCTGTC CCTCGGGCTG CCAGGCCAGC AGCAACACCC ACAGGTAATC TCCCCGCTGA      240
CTCCATCCAC TTGCTCTGCC CTCTGCCCTC TCTGTGCCCC GTTGCACCTG AGCGTACACC      300
CCAGCAGTGG CATCCAATC GAG                                         323
```

(2) INFORMATION FOR SEQ ID NO:281:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 337 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:281:

```
GAATTCGGCC AAAGAGGCCT ACTCAGTCAG TACCATGCCA GTTACCTTTT TTCCTTGTGA      60
CTTAATGAAT TGGATTTTCC TCAATCTGTT ATTTGTAGGA GGTGTGTATG GGGCCAGGGT      120
AGATTTCCAG ATTTCTGCCT CAGAGGTAGT CTTTTCACA TATGACACCT GGGTGTGTGT      180
CTCTGTGTGG CCACAAGTCT TCTGCCTCTC TAAAAAATG TCTAGACCTT CTAGAAGGTC      240
TTTTGCCGCT AATTCTGAAC TTTCCACTCC TTCCTTTGCA GCTGTGATTG GAGGGACATG      300
GCTCCAGCAT GCCAATGTAA ACCACCGCCC CCTCGAG                                         337
```

(2) INFORMATION FOR SEQ ID NO:282:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 194 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:282:

```
GAATTCGGCC AAAGAGGCCT AGGCTCTTCC ACTTAATTTT ATACTTTCAG GTCTGGATGC      60
CCATTTTAAT TCTTCTGAAA GCATGCCTCC TTCTGGCTTC AGGACTCCAT CTCCAGCCTT      120
ATGATCTAAA AATAATGGAA AATTACCCGG TATCGTTAGA GCTACACCAA AATTGCATTG      180
AGCCAAAAC TCGAG                                         194
```

(2) INFORMATION FOR SEQ ID NO:283:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 296 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:283:

```
GAATTCGGCC AAAGAGGCCT AAAATCATCA TATTCATAGA GATATTAAAA GTGCAAATAT    60
CTTACTGGAT GAAGCTTTTA CTGCTAAAAT ATCTGACTTT GGCCTTGAC GGGCTTCTGA    120
GAAGTTTTGC CCAGACAGTC ATGACTAGCA GAATTGTGGG AACAAACAGCT TATATGGCAC    180
CAGAAGCTTT GCGTGGAGAA ATAACACCCA AATCTGATAT TTACAGCTTT GGTGTGGTTT    240
TACTAGAAAT AATAACTGGA CTTCCAGCTG TGGATGAACA CCGTGAACCA CTCGAG    296
```

(2) INFORMATION FOR SEQ ID NO:284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:284:

```
GAATTCGGCC AAAGAGGCCT AGCAACATCC ACGCAGCTGC TCATCAGGTA CGAGTGCTTC    60
CATATCCATT TACCCACCAT TGGCAATTG AAAGGACCAT CCAGACCCCC ATAGGATCCA    120
CATGGAACAC CCAGAGGGCT TTCCAAAAGC TGACTACTCC CAAGGTCGTC ACCAAGCCAG    180
GCCATATCAT TAACCCATA AAAGCAGAAG ACGTGGGCTA CCGGTCTTCC TCAAGGTCGG    240
ACCTGTCTGT CATAACAGAG AATCCAAAAC GAATCACCAC ACGTCACAAA AAACAGCTGA    300
AGAAATGCTC TGTAAGATTGA GTTGCTGGAG GAGTGACAGC CAGGAGCCCT GACTTCACTT    360
CCTTTGGTCC AGTTTACTC TGATACAGGG TGGATTCCAA AACTGGCTCA GTACATTGCA    420
TGTAAGTTAAG CCACATTTTA AAAATAAAGG CTCGAG    456
```

(2) INFORMATION FOR SEQ ID NO:285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:285:

```
GAATTCGGCC AAAGAGGCCT AAGGTCGGCC TGTTTCATCTT GATTAGCATC CAGGCCTTGG    60
AATATTTCAT CAATGACAGC TTTATCTTTG ATATTCTTGA TGGTGTGTC AAGCTCCTTT    120
GTAAGCAGCT GCTTCAGCTC ACCCTCGAG    150
```

(2) INFORMATION FOR SEQ ID NO:286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:286:

AATCCAAGCA ATAACCCAAG CAAAACCTTCA GATGCACCTT ATGATTCTGC AGATGACTGG 60
TCTGAGCATA TTAGCTCTTC TGGGAAAAAG TACTACTACA ATTGTGCAAC TCGAG 115

(2) INFORMATION FOR SEQ ID NO:287:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:287:

GGAAGAAGAT GCTAGGAGAA GACTCAGATG AAGAAGAGGA AATGGATACC TCTGAAAGGA 60
AGATAAATGC TGGTAGCCAA GATGATGAGA TGGGTGTCAC CTGGGGAATG GGAGAAGATG 120
CAGTAGAGGA TGATGCTGAA GAGAACCCTA TTGTCTTAGA GTTTCAGCAG GAAAGGGAGG 180
CCTTTTATAT AAAGGATCCC AAAAAGGCTC TCCAAGGCTT TTTTGACCGA GAAGGAGAAG 240
AATTAGAATA TGAATTTGAT GAACAGGGAC AACTCGAG 278

(2) INFORMATION FOR SEQ ID NO:288:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:288:

GGATTCTGA GGCCAACTGC CCAATAGTTT CCAGTAGAAA CATGGCCATA CCAGTCTAGA 60
ATTTAACCTT CTCATTTAAT CAATAGCACA ATCTAACCTA CACAAGAATA AGCAATCAAA 120
CATCCAGTAT AACATGTTTT TCATTTTAC TTTCTGCGG TCAATTTTTT TAATGATCTA 180
TTTAAATTTT TTTCAAAATG ACAACTACTA TGGAACTAGT AATACAAAGT TCAGTAACAC 240
AACATTGATA ACAACAACAG CAGCAACAAT ACCACAACCA CCACCACTGA ATGGTCTGGG 300
CACCTTCACA ATGGCTGTTG TACTTAGTTA CGAAGAAGAG TGGGGACAGA AAATGAAGCT 360
CGAG 364

(2) INFORMATION FOR SEQ ID NO:289:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:289:

GACTCCATGC GTATGTCCCA CCTAAAGGTC GGCTCTGCTG CCGACATCCC CATCAACATC 60
TCAGAGACGG ATCTCAGCCT GCTGACGGCC ACTGTGGTCC CGCCCTCGGG CCGGGAGGAG 120
CCCTGTTTGC TGAAGCGGCT GCGTAATGGC CACGTGGGGA TTTCATTCTG GCCCAAGGAG 180
ACGGGGGAGC ACCTGGTGCA TGTGAAGAAA AATGGCCAGC ACGTGGCCAG CAGCCCCATC 240
CCGGTGGTGA TCAGCCAGTC GGAAATTGGG GATGCCAGTC GTGTTCTGGT CTCTGGTCAG 300
GGCCTTCACG AAGGCCACAC CTTTGAGCCT GCAGAGTTTA TCATTGATAC CCGCGATGCA 360

GGCTATGGTG GGCTCAGCCT GTCCATTGAG GGCCCCAGCA AGGTGGACAT CAACACAGAG 420
GACCTGGAGG ACGGGACGTG CAGGGTCACC TACTGCCCCA CAGAGCTCGA G 471

(2) INFORMATION FOR SEQ ID NO:290:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:290:

GAAATTCGGCC TTCATGGCCT AGATTGAGTC ACATTGTTCT CTTTGATCCA TTTTCTTTTA 60
GACAACATCA CTCAAACAAC CCTATTACTT CAGTAGCAAT GAACTGTCTC TGGATTTTAT 120
TAAGCATCTC ACTTGTTCCT TTTCTTCAGC TGTATGGCAC CCTGTCTTCC TGTACACCAG 180
AGGCTCCTCA GCTGGGTAAG GTGAGCCAAC GTTACCAGGA GTATATGCTG AGAGGCCATT 240
TCAAAGTCTT TCATAGAAGG CTGTGCTTGG GCAAACCTCGA G 281

(2) INFORMATION FOR SEQ ID NO:291:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:291:

GAAACTCTGC CCCTGAAGGT TTGTTTTCTA ATTCAGAGGT TTAAATTAAT CTAGCCCACT 60
TAATAAAACC AGAGATCCTA TGGGAAATTT AGCCTAAGAC AGTGCTGGAA ATTGCCATAT 120
GTTGATACAA AGAAGTGTTT GGCCACATTA CAGGTCTCAG ACTCAACTGC TATGTGTGAC 180
TGCCGCTCTG TGCCTATGTC TTGCTTTTTT GCTGAGTTCC CTATTTCCAT ATCTCCAGGT 240
GATCCTCGAG 250

(2) INFORMATION FOR SEQ ID NO:292:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:292:

GAAATGTCAG AGGCACATAA GCTTTTACAA AAATTGTTGG TTCATTGTCA GAACTGAAG 60
AACACAGAAA TGGTGATCAG TGTCTACTG TCCGTGGCAG AGCTGTACTG GCGATCTTCC 120
TCCCCTACCA TCGCGCTGCC CATGCTCCTG CAGGCTCTGG CCCTCTCCAA GGAGTACCGG 180
TTACAGTACT TGGCCTCTGA AACAGTGCTG AACTTGGCTT TTGCGCAGCT CATCTTGGGA 240
ATCCCAGAAC AGGCCCAACT CGAG 264

(2) INFORMATION FOR SEQ ID NO:293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:293:

```

GAATTCGGCC CTTCATGGCC TAGGTTTCTC CGTGTGGTTC AGGCTGGTCT CGAACTCCTG      60
ACCTCAGGTG ATCCACCTGC CTCAGCCTCC CAAAGTGCTG GGATTACAGG CATGAGCCAC      120
CATGTCCTGC TATAAATAAC TTTTAATAGG CTCTTTTCTT GGCTTTTTTT TTTAGTAACT      180
CAGCCCATTT TCTTCTTCTC AATCTGGTCT TTGTTAATGT TGATAACGCT GTCTTACTTT      240
TAAATTGCCG TGATTAGAAA TTAGTAGAGA TATATAAACC TAGTCTTTTG GGGGATTTTG      300
AAAGGGTCAT AGTATTCTTA CTGCTTTCA AAATGTACCT TATATTTGAA CATTGGAAGA      360
TACGTGTTGC TGAATACAAG TTAGTTTCAT ACACACACAT ACACATGACA CTCGAG      416

```

(2) INFORMATION FOR SEQ ID NO:294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:294:

```

GAATTCGGCC TTCATGGCCT ACTCCATTCC CAGATAGAAA GCTTGAATGA AGAGTTGGTC      60
CAGCTGCTTC TCATCCGAGA TGAGCTGCAC ACAGAGCAGG ATGCCATGCT GGTGGACATT      120
GAAGACTTGA CCAGACATGC TGAAAGTCAG CAGAAGCACA TGGCAGAGAA AATGCCTGCA      180
AAGTGAAAAG AAGCCATTCA ACCAGAGAAC AAGCTAGAAT TTATTTTGCT TCTGTGGTTG      240
TAAAAATGCT GTTGCTAAAG GTGGCGCAGA AACAAATATC AGTGTTAGTC ATTGATAATG      300
TCTGAAGCTT AATGTCCAGT GATTGGCCTT TGCTTCTTAA TTTATTTTAA TTTTACTT      360
GTGCCACTTA ATATCAGGCA TTTTAATAAA ATATTGTTAC AAAAAATGTA CAGTACTGAC      420
ACCACCACAA ATCATGGTTA ATAAAAGAGA GTCTCGAG      458

```

(2) INFORMATION FOR SEQ ID NO:295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:295:

```

GTGTAAAACC AATGCCAGGA AAACCAAATA CACAAAACCC TCCACGGAGA GGTCTCTGTA      60
GCCAGAATGG GTCTTTTGGC CCATCCCCTG TGAGTGGTGG AGAATGCTCC CCTCCATTGA      120
CAGTGAGGCC ACCCGTGAGA CCTCTCTCTG CTACTCTCAA TCGAAGAGAT ATGCCTAGAA      180
GTGAATTTGG ATCAGTGGAC GGGCCTCTAC CTCATCCTCG ATGGTCAGCT GAGGCATCTG      240
GGAAACCCTC TCCTTCTGAT CCAGGATCTG GTACAGCTAC CATGATGAAC AGCAGTCTCG      300
AG      302

```

(2) INFORMATION FOR SEQ ID NO:296:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:296:

```

CATGGATCTG CCTCCTGAGA GGGATGGAGA GAAGGGGAGG AGCACAAAGC CTGGCTTTGC      60
CATGCCAAAA CTTGCACTTC CCAAAATGAA GGCTTCTAAG AGTGGGGTCA GCCTGCCACA      120
GAGAGACGTG GATCCTTCCC TTTCTAGTGC CACAGCAGGG GGTAGCTTTC AAGACACAGA      180
AAAGGCCAGC ACTGACGGTG GTAGGGGAGG ACTTGTTGCA ACAGCAAGTG CCACAGGAAG      240
TGAGGGTGTG AACCTCCACC GGCCACAGGT CCACATTCCC AGTTTGGGCT TTGCCAAACC      300
TGATCTCAGA TCCTCCAAGG CCAAGGTGGA GGTGAGCCAG CCTGAAGCTG ACCTGCCTCT      360
TCCCAAACAT GATCTGTCTA CCGAAGGTGA CAGCAGAGGA TGTGGGCTCG AG              412

```

(2) INFORMATION FOR SEQ ID NO:297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:297:

```

GTGCTGGTGG CGCGGGGAGT GCGCGTCAAG GTGAACGAGG CCTACCGGTT CCGCGTGGCA      60
CTGCCTGCGT ACCCAGCGTC GCTCACCGAC GTCTCCCTGG CGCTGAGCGA GCTGCGCCCC      120
AACGACTCAG GTATCTATCG CTGTGAGGTC CAGCACGGCA TCGATGACAG CAGCGACGCT      180
GTGGAGTCA AGGTCAAAGG GGTGCTCTTT CTCTACCGAG AGGGCTCTGC CCGCTATGCT      240
TTCTCCTTTT CTGGGGCCCA GGAGGCCTGT GCCCGCATG GAGCCCACAT CGCCACCCCA      300
ATCTCGAG                                     308

```

(2) INFORMATION FOR SEQ ID NO:298:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:298:

```

GAATAAGTAA ATTCATGGAA AGGAAGAAAT TAAAAGAAAG TGAGGAAAAG GAAGTGCTTC      60
TGAAAACAAA CCTTCTGGA CGGCAGAGCC CAAGTTTCAA GCTTTCCCTG TCCAGTGGAA      120
CGAAGACTAA CCTCACCAGC CAGTCATCTA CAACAAATCT GCCTGGTTCT CCGGGATCAC      180
CTGGATCCCC AGGATCTCCA GGCTCTCCTG GATCCGTACC TAAAAATACA TCTCAGACGG      240
CAGCTATTAC TACAAAGGGA GGTCTCGAG                                     269

```

(2) INFORMATION FOR SEQ ID NO:299:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:299:

```
GAGCGACCTT TGGAATAGTT AAGCACAGGT CATTGTGGAC ATGAATTCAG GCCTCTGTAC      60
TAAAATCTAT TTCAGGGAAT GTTCTGTCTA GTGATTGCT CACCATTGA TATATAATGA      120
ATTATAGGAC AAGTATAAGC TGATCTGCTA TAGCTGTCCA TCAGAGAGAA TACACGTGGC      180
TATAACATCT ATAACAAAAC GACGATTCCT CTACAAGAGG CTGTTTCTCA CTGCTAACGT      240
TGGTGTTCCT GCGGTGGGAA GAAATGCACA GCGGTGCATG GCATGCACGT TCAGACAGCT      300
GCATTGTAAG AGTTCTGTCA TGCAGTCTGA AAAGGGAAGA AACAGGATGG CTTTCTGTAG      360
CCACACCTGT GAGGCGTGAT GATTGTTGTA TTATTAGATT ACTGATTTT CTTTCTGTAA      420
AATACATTG AGTTTAAATC ACATCTGTGG AACTCGAG                                458
```

(2) INFORMATION FOR SEQ ID NO:300:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 99 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:300:

```
GGGATGCCTG TTCTTGGGT AGAGAAGTCA GGTAGCCCAG GGCCCGCACT CTCAATAGAC      60
CTTCAGAGAA AAGGCATCGA GGTAAATGCC GCACTCGAG                                99
```

(2) INFORMATION FOR SEQ ID NO:301:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 569 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:301:

```
GGTCTAACAG TAACACTACT CAAGAGACCC TGGAAATAAT GAAAGAATCA GAAAAAAAC      60
TGGTGAAGA ATCTGTAAAC AAAACAAGT TTATATCTAA GACTCCAAGT AAGGAAGAAA      120
TTGAGAAAGA ATGTGAAGAT ACCAGTTTGC GTCAGGAGAC ACAGAGGCGG ACATCTAACC      180
ATGGTCATGC CAGGAAAAGA GCCAAGTCTA ATTCCAAGCT AAAGTTGGTG CGTAGCCTGG      240
CAGTGTGTGA GGAGTCCTCC ACCCCATTG CTGATGGGCC ATTAGAAACC CAGGATATAA      300
TTCAATTGCA CATCAGTTGC CCTTCTGACA AGGAGGAAGA AAAGTCCACA AAAGATGTCT      360
CTGAAAAGGA AGACAAGGAC AAAACAAG AAAAGATCCC AAGGAAGATG CTGTCCAGAG      420
ACTCCAGCCA GGAATATACG GACTCCACTG GAATAGACCT ACATGAATTT CTGTAAATA      480
CACTGAAAAA GAACCAAGG GACAGAATGA TGCTGCTAAA ATTAGAACAG GAGATTCTGG      540
AATTATTAA TGACAACAAC CCACTCGAG                                569
```

(2) INFORMATION FOR SEQ ID NO:302:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 311 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:302:

```

GCGATTGAAT TCTAGACCTG CCACCCAAAC CCCAACTCTC AGACTTACCT CCCAAACCAC      60
AGATGAAGGA CCTGCCCCC AAACCACAGC TGGGAGACCT GCTAGCAAAA TCCCAGACTG      120
GAGATGTCTC ACCCAAGGCT CAGCAACCCT CTGAGGTCAC ACTGAAGTCA CACCCATTGG      180
ATCTATCCCC AAATGTGCAG TCCAGAGACG CCATCCAAAA GCAAGCATCT GAAGACTCCA      240
ACGACCTCAC GCCTACTCTG CCAGAGACGC CCGTACCACT GCCCAGAAAA ATCAATACGG      300
GGGCACTCGA G                                     311
  
```

(2) INFORMATION FOR SEQ ID NO:303:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 683 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:303:

```

ACAGCATGAA GGCAGAAGCC AATGCCCTGC ATCACAACA CGACAAGAGG AAGCGTCCGG      60
GGAAGAATGC ACCCCAGGA GGTGATGAGC CACTGGCAGA GACAGAGAGT GAAAGCGAGG      120
CAGAGCTGGC TGGCTTCTCC CCAGTGGTGG ATGTGAAGAA AACAGCATTG GCCTTGGCCA      180
TTACAGACTC AGAGCTGTCA GATGAGGAGG CTTCTATCTT GGAGAGTGGT GGCTTCTCCG      240
TATCCCGGGC CACAACCTCC GAGCTGACTG ATGTCTCCGA GGATTGAGC CAGCAGAGCC      300
TGCCAAGTGA ACCAGAGGAG ACCTAAGCCG GGACCTAGGG GAGGGAGAGG AGGGAGAGCT      360
GGCCCCCTCC CGAAGACCTA CTAGGCCGTC CTCAAGCTCT GTCAAGGCAA GCCCTGGACT      420
CGGAGGAAGA GGAAGAGGAT GTGGCAGCTA AGGAAACCTT GTTGCGGCTC TCATCCCCC      480
TCCACTTTGT GAACACGCAC TTCAATGGGG CAGGGTCCCC CCCAGATGGA GTGAAATGCT      540
CCCCTGGAGG ACCAGTGGAG ACACTGAGCC CCGAGACAGT GAGTGGTGGC CTCACTGCTC      600
TGCCCGGCAC CCTGTACCT CCACTTTGCC TTGTTGGAAG TGACCCAGCC CCCTCCCCTT      660
CCATTCTCCC ACCTGATCTC GAG                                     683
  
```

(2) INFORMATION FOR SEQ ID NO:304:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 653 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:304:

```

GAATTCGGCC AAAGAGGCCT AGAGATGTCT ACTCTCAGCT CACGCCTGTA ATCCCAGCAT      60
TGTGGGGAGG TCAAGTTGGG TGGATTGCTT GAGCCCAGGA GTTTGAGACC AGCCTAAGCA      120
ATAGGCAAAA CCCTGTCTCT ACAAAAATCA GCCAGGTATG GTAGTGTGTA CCTGTAGTCC      180
TAGCTACTCA GGAGGCTGAG GTGGGAGGAT CGCTTGAGCC TGGGAGGTGA AGGCTGAAAT      240
TAGCCATGAT CATGCCACTG CACCCCAAGC CTGGGCAACA GAGCAAGACC TTGTCTCAA      300
AAAAAAGGA TGAGCTAGGT TTGTATCTGT AGACAGAGAT TTATGATTAA TTGGTAGGTG      360
AAAAAGTGTA TTAAAGTACA GTTATAGATT AGAGTACAAA ATGAATGAGT ATATATGCGT      420
  
```

```

TTAAAAGTAT GTATACATAT CAGGAAAGGT TACATGAGGA TTTTCACTTT CCACTTTATA      480
TCTCCAGTA TTTGAATTTT TAATAACAAT CTTTTTATCA TAAACTATA TTAAATTAAA      540
CTTTTAGATT TTTTAGTGGT ATAAGTAGAA CAGGAACCTT AATACATTGT TTTCTACTTT      600
TGTGATAAAG ATAATTCATG ATAGATGAAG TTGCAAACCG AAAGATCCTC GAG              653

```

(2) INFORMATION FOR SEQ ID NO:305:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:305:

```

GAATTCGGCC TTCATGGCCT AAGGTATTCC AAAATGTCTA ATTTATTTTA TCCGATGGTA      60
AATGTAATAA TTAAAGAAAG AGGAAAGAAT CATGAAAGGT GGCCCTTAAA GAGGGCTTCT      120
GGCAGAGTTA GGTCAGAGGC ACACCTTCTT ACAGACTAAG AGTTTTTAAG TACTCAAGGT      180
GATGTTTATC AGAAGCTTGG ACTGCTTCTG TGTCTTTTAA TTGTGCTTAT CTGGGAGGGA      240
GAGTTCTGTG TCTGCTCCTA TACATCTTTC TGCAGCTGCA GACATACTCC CTGAGTCTGC      300
TTTTAGCTTT CCTATCTTAG TGCACCTGAA GGGAAAGGAA TGAGCTTATT AAGGCCCACT      360
GTTTTACTGG GGCCCATTTG ATGAGAGTGA AGTTTGGCAG TTACCCAAGA GACGTTCCCC      420
TCACCTCCCT CCGGCGCTCG AG              442

```

(2) INFORMATION FOR SEQ ID NO:306:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:306:

```

GAATTCGGCC TTCATGGCCT ACCAATATGC AAATCAGTAC CTCTTCTCTT AGAGGTGTTC      60
ATGCCCCAAGC TCCTCAGACA AGTCCATCCC ACTGTGTGGG AGGAAGTTGA AGGGTGAGGA      120
TTTTTAAGAT TTTTATCTTG CTTGAAGTTG TGAAGACTCA ATGACAAATG GCTAGGTTTT      180
GAAGGGGTCT TGAAGTCAT TACTGGGGAT AGACCCCTCT TGATACTTGT CACATTAATA      240
TCTGCCCAGA CTCTCACACA TTCAGATGTT TAACGTCACA TGCATTAAGT TCTTTTGGTT      300
GCATGAGACA GTGATGCACA GAACTCACT TAGGAAAGGA GATAGGTGGC AATAAAGAAA      360
ACAGGGATTT CATAGGAATG CAGTAAAAAA AAAACCATGG CCTAATCTCG AG              412

```

(2) INFORMATION FOR SEQ ID NO:307:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:307:

```

GGGGTTGTCT GAGGCCCAGA GGTCGTATAA GGGCCGCTCT ACGGTGTCCT GGGGCCCGGG      60

```

CTTGGCCCTT GTTGCAGAAG GGTGAGGAG CCGGGCTGGG CCCTGCGCAC CTCCCGGGGC	120
AGCTCGCCCT GCTTGGCCAG CTTCTCCCAT AGCTGCTCCT TCCGCCTGAG CTTCTTGGCG	180
TTGGGGACCT GGTGGGCGAG GACGTCTTTG GGGGCAGGGA CTTTGGATGT GTTCTCGAG	239

(2) INFORMATION FOR SEQ ID NO:308:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 533 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:308:

GCGCAACATC CTGGGAAGTG CATGTCTCAG ACCAACTCCA CCTTCACCTT CACCACCTGT	60
CGCATCCTGC ATCCTTCAGA TGAGCTCACT CGGGTCACAC CAAGCCTTAA CTCAGCCCCA	120
ACTCCAGCTT GTGGCAGCAC CAGCCACTTG AAATCCACGC CGGTGGCCAC ACCATGCACT	180
CCACGGAGAC TGAGCCTGGC TGAGTCCTTC ACTAACACCC GTGAGTCCAC GACCACCATG	240
AGCACATCCC TGGGGCTCGT GTGGCTGTTG AAGGAGCGGG GCATTTCTGC TGCCGTGTAC	300
GACCCCCAGA GCTGGGACAG GGCCGGCCGG GGCTCCCTCC TGCACTCCTA CACGCCCCAAG	360
ATGGCTGTGA TCCCTCTAC TCCGCCGAAC TCGCCTATGC AGACACCAC ATCCTCCCCA	420
CCCTCCTTTG AGTTCAAGTG CACGAGCCCT CCCTACGACA ATTTCTGGC TTCCAAGCCA	480
GCCAGCTCCA TCCTGAGGGA AGTGAGAGAA AAGAACGTCC GCAGGACCTC GAG	533

(2) INFORMATION FOR SEQ ID NO:309:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:309:

GAATTCGGCC AAAGAGGCCT ACCCTAAAAC ATTTATTTCA AGGAGAAAAG AAAAAGGGGG	60
GGCGCAAAAA TGGCTGGGGC AATTATAGAA AACATGAGCA CCAAGAAGCT GTGCATTGTT	120
GGTGGGATTC TGCTCGTGT CCAAATCATC GCCTTTCTGG TGGGAGGCTT GATTGCTCCA	180
GGGCCCACAA CGGCAGTGTC CTACATGTGC GTGAAATGTG TGGATGCCCG TAAGAACCAT	240
CACAAGACAA AATGGTTTCGT GCCTTGGGGA CCAATCATT GTGGCAAGAT CCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:310:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:310:

GAATTCGGCC AAAGAGGCCT AGGGTTTAAG AGCTGTGGAG GACTGAAAAC TGGATAAAAA	60
GGGGGTCCTT TTCCTTGCCC CTGTCTCTCA CTCAGATGCG CTTCTTTTTC GCCACTGTTT	120
GGCAAAGTTT TCTGTTAAGC CCCCAGTTCT CCAGGTGCGT TACTATTTCT GGGATCATGG	180

GGTCAGTTTT AGGACACTTG AACACTTCTT TTCCCCCTC CCCAGTTCTC CAGGTGCGTT 240
ACCTCGAG 248

(2) INFORMATION FOR SEQ ID NO:311:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:311:

GAATTCGGCC AAAGAGGCCT AGGTAAATAA CTAATATGA TGTATTTTA TATTTAATA 60
TAGACTAGTA AACTATGCAG AGTTAAGTGT TACATTAGAA TCTTGAATC TCCTAACATT 120
TCTCTTCCTC AGTTTCCTAT TGTTTTGGTA GAGTATGTAG ACATTGCGA GATTAATTTA 180
GAGTTGGTAG ATACATTCTG GATTTTATTT TACTTTAGAT AGCAGGTTG GCACTTTAAA 240
TATATTTAAT TCAGTAAGAG AATAACTGAG TATGAGCTGT ATCCTCATCT TACTGTTGAA 300
GACATCCCAA ATAGTTGGGT GTGCACTGTG GCGGGATCTC GAG 343

(2) INFORMATION FOR SEQ ID NO:312:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:312:

GAATTCGGCC AAAGAGGCCT ACGGGGAGGC GCGCCCGCGC TGAGTCGGCG GCGGGTAGCC 60
ACTCCATGCC CTGTCCGAT GGTGTGCAAC TCCGATTTG CACACCGCTC CACCGTGCC 120
CCGAGCGCAC ACCCATTCAC ACTCAGGCCA AACTCTCGC TGAACACTTT TATAATTGTT 180
AGGCGTGGCC GTTGGGACTT TGGGCGCAGC GCGGCTGATA CTGCGTCTG AGGATTGATA 240
TTTACTTTTG CATTGCGGTT ACCTCGAG 268

(2) INFORMATION FOR SEQ ID NO:313:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:313:

GTCTCTCGCC GCCGAGGAA GATGANGCTG AAGATTGGAT TCATCTTACG CAGTTTGCTG 60
GTGGTGGGAA GCTTCCTGGG GCTAGTGGTC CTCTGGTCTT CCCTGACCCC GCGGCCGGAC 120
GACCCAAGCC CGCTGAGCAG GATGAGGGAA GACAGAGATG TCAATGACCC CATGCCCAAC 180
CGAGGCGGCA ATGGACTAGC TCCTGGGGAG GACAGATTCA AACCTGTGGT ACCATGGCCT 240
CATGTTGAAG GAGTAGAAGT GGACTTAGAG TCTATTAGAA GAATAAACAA GGCCAAAAAT 300
GAACAAGAGC ACCATGCTGG AGGAGATTCC CAGAAAGATA TCATACTTCT CGAG 354

(2) INFORMATION FOR SEQ ID NO:314:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:314:

```

GAATTCGGCC AAAGAGGCCT AGTGCAAGAA CATGAAGCAC CTGTGGTTTT TCCTCCTGCT      60
GGTGGCAGCT CCCAGATGTG TCCTGTCCCA GGTGCACCTG CAGGAATCGG GCCCGGGACT      120
GTTGAAACCT TCGGACACCC TGTCCCTCAC CTGCTTTGTC TCGGGTTACT CCCTCAGTAG      180
TGTTCACTAT TGGGGCTGGA TCCGCCAGTC CCCAGGGAAA GGACTGGAGT GGATTGGGAA      240
CATCCATCAC AATGGTAGAA CCAATTACAA CCCGTCCCTC GCCAGCCGCG GTTCCATCTC      300
AGCCGACACG TCCAGAACT CCCTCTCCCT GAATCTGACC TCTGTGACCG CCGCAGACTC      360
GGCCGTCTAT TTCTGTGCGA GCGGCCCTAT TGCCTCCTTT GAATCGACGA CTCTAAAGGT      420
GGGCGGAGAC TTTACTCTCT GGGGCCAGGG AATCCTGGTC ACCGTCTCCT CAGCATCCCC      480
GACCAGCCCC AAGGTCTTCC CGCACAGCCT CGAG                                     514

```

(2) INFORMATION FOR SEQ ID NO:315:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:315:

```

GAATTCGGCC AAAGAGGCCT AGGACACTAG AATTATTAGT GTTCATTTTC ATCTAAGATC      60
TTTATTCTCT AACGTTCTTG GTCCTATTGA AACATTGCAG TATGCAAAAC TACTGCAATG      120
TTAAACCCAA GAGAAAAGCC ATTATCATGT GTATGCTGGT CATCATGATC AGTGTGGTAC      180
AATTTTAA AATAAACTAT CATGCCCTTC TCGAG                                     215

```

(2) INFORMATION FOR SEQ ID NO:316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 788 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:316:

```

GAATTATGTA CGCCCTCTTC CTCCTGGCCA GCCTCCTGGG CGCGGCTCTA GCCGGCCCGG      60
TCCTTGGA CT GAAAGAATGC ACCAGGGGCT CGGCAGTGTG GTGCCAGAAT GTGAAGACGG      120
CGTCCGACTG CGGGGCACTG AAGCACTGCC TGCAGACCGT TTGGAACAAG CCAACAGTGA      180
AATCCCTTCC CTGCGACATA TGCAAAGACG TTGTCAACCG AGCTGGTGAT ATGCTGAAGG      240
ACAATGCCAC TGAGGAGGAG ATCCTTGTTT ACTTGGAGAA GACCTGTGAC TGGCTTCCGA      300
AACCGAACAT GTCTGCTTCA TGCAAGGAGA TAGTGGACTC CTACCTCCCT GTCATCCTGG      360
ACATCATTA AGGAGAAATG AGCCGTCCTG GGGAGGTGTG CTCTGCTCTC AACCTCTGCG      420
AGTCTCTCCA GAAGCACCTA GCAGAGCTGA ATCACCAGAA GCAGCTGGAG TCCAATAAGA      480

```

TCCCAGAGCT	GGACATGACT	GAGGTGGTGG	CCCCCTTCAT	GGCCAACATC	CCTCTCCTCC	540
TCTACCTCA	GGACGGCCCC	CGCAGCAAGC	CCCAGCCAAA	GGATAATGGG	GACGTTTGCC	600
AGGACTGCAT	TCAGATGGTG	ACTGACATCC	AGACTGCTGT	ACGGACCAAC	TCCACCTTTG	660
TCCAGGCCTT	GGTGGAAACAT	GTCAAGGAGG	AGTGTGACCG	CCTGGGCCCT	GGCATGGCCG	720
ACATATGCAA	GAATATATC	AGCCAGTATT	CTGAAATTGC	TATCCAGATG	ATGATGCACA	780
TGCTCGAG						788

(2) INFORMATION FOR SEQ ID NO:317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 214 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:317:

GAATTGGGCC	AAAGAGGCCT	AAATCATCCT	GATGATGGTT	TTCTTACATA	AACATGAGCT	60
TCTGACCATG	TACCATGGAT	GGGTTCTCAC	TTCTGCTAT	ATCCTGATCA	TCATTATTGC	120
AAATATTGCA	AATTTGGCCA	GTACTGCTAC	TGCAATCACA	ATCCAAAGGG	ATTGGATTGT	180
TGTTGTTGCA	GGAGAAGACA	GAAGCAAAC	CGAG			214

(2) INFORMATION FOR SEQ ID NO:318:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:318:

GTGTCTTTT	TTCCCCTTTA	TAGTGCTGG	AGTGAATTTT	AGAAAGCCTA	AGTCATACAT	60
CACATTGCTT	CATGGGCATC	CCAGTACACT	TTGGATTTTA	TTTACATCC	TTACTGATCT	120
GATTCTCATC	TCTGTCTCTT	CATGGTTCTC	TGCCTTCTAG	TTACTACTGGT	GACCTTTCAA	180
AACCTTTACC	ACATTGAGTT	CATTCTTAC	TTTTCACTCT	TTCTCTGCCT	GGAGTGTTC	240
GCCCCATCTT	TACGTGGCAC	GCTCGAG				267

(2) INFORMATION FOR SEQ ID NO:319:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:319:

GAAGCTTTCA	GGCTATCTTC	TAGTCAAGAT	GAGTGATAAG	CCAGACTTGT	CGGAAGTGGA	60
GAAGTTTGAC	AGGTCAAAC	TGAAGAAAAC	TAATACTGAA	GAAAAAAAT	ACTCTTCCT	120
CAAAGGAAAC	TATCCAGCAA	GAGAAAGAGT	GTGTTCAAAC	ATCATAAAAT	GGGGATCGCC	180
TCCCAACAGC	AGATTTGAC	ATTACCTGAG	AGTCTTGATT	TTAGGCTTGT	TTTTGTAA	240
CCCATGTGTT	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:320:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:320:

```

GCTGCGTGTG ATGGAGACCA AACCCGACAA GGCAGTGTCC ATCATTGAGT GTGACATGAA      60
CGTGGACTTT GATGCTCCCC TGGGCTACAA AGAACCCGAA AGACAAGTCC AGCATGAGGA      120
GTCGACAGAA GGTGAAGCCG ACCACAGTGG CTATGCTGGA GAGCTGGGCT TCCGCGCTTT      180
CTCTGGATCT GGCAATAGAC TGGATGGAAA GAAGAAAGGG GTAGAGCCCA GCCCCTCCCC      240
AATCAAGCCT GGAGATATTA AAAGAGGAAT TCCCAATTAT GAATTTAAAC TTGGCGCGCT      300
CGAG                                     304

```

(2) INFORMATION FOR SEQ ID NO:321:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:321:

```

GAATTCGGCC AAAGAGGCCT ACTCTTACAC CTTCCGCTCC GTGGGCACCT TCAATATCAT      60
CGTCACGGCT GAGAACGAGG TGGGCTCCGC CCAGGACAGC ATCTTCGTCT ATGTCCTGCA      120
GCTCATAGAG GGGCTGCAGG TGGTGGGCGG TGGCCGCTAC TTCCCCACCA ACCACACGGT      180
ACAGCTGCAG GCCGTGGTTA GGGATGGCAC CAACGTCTCC TACAGCTGGA CTGCCTGGAG      240
GGACAGGGGC CCGGCCCTGG CCGGCAGCGG CAAAGGCTTC TCGCTCACCG TGCTCGAG      298

```

(2) INFORMATION FOR SEQ ID NO:322:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:322:

```

GCGCCGTGTC CTTTTCGCTT GGTACCAGCG GCGACATGAC GGGGTACACT CCGGATGAGA      60
AACTGCGGCT GCAGCAGCTG CGAGAGCTGA GAAGGCGATG GCTGAAGGAC CAGGAGCTGA      120
GCCCTCGGGA GCCGCTGCTG CCCCCACAGA AGATGGGGCC TATGGAGAAA TTCTGGAATA      180
AATTTTGGGA GAATAAATCC CCTTGGAGGA AAATGGTCCA TGGGGTATAC AAAAAGAGTA      240
TCTTTGTTTT CACTCATGTA CTTGTACCTG TCTGGATTAT TCATTATTAC ATGAAGTATC      300
ATGTTTCTGA AAAACTCGAG                                     320

```

(2) INFORMATION FOR SEQ ID NO:323:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 307 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:323:

```
GCAAAATCT CAGGCCCCAG AAAAGCCTCT TGTCATCTCT CAGATGGGTT CCAAAAAGAA    60
GCCAAAATT ATCCAGCAAA ACAAAAAAGA GACCTCGCCT CAAGTGAAGG GAGAGGAGAT    120
GCCGGCAGGA AAAGACCAGG AGGCCAGCAG GGGCTCTGTT CCTTCAGGTT CCAAGATGGA    180
CAGGAGGGCG CCAGTACCTC GCACCAAGGC CAGTGAACA GAGCACAATA AGAAAGGAAC    240
CAAGGAAAGG ACAAATGGTG ATATTGTTCC AGAACGAGGG GACATCGAGC ATAAGAAGGA    300
ACTCGAG                                     307
```

(2) INFORMATION FOR SEQ ID NO:324:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 299 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:324:

```
GCACTTCTGA GAGGATGCTG GGAATCTGCA GGGGGAGACG GAAATTCTTG GCTGCCTCGT    60
TGAGTCTTCT CTGCATCCCA GCCATCACCT GGATTACCT GTTTTCTGGG AGCTTCGAAG    120
ATGGAAAGCC CGTGTCTCTG TCACCGCTGG AGTCCCAGGC ACACAGCCCC AGGTACACGG    180
CCTCCAGCCA GCGGGAGCGC GAGAGCCTGG AGGTGCGCAT GCGCGAGGTG GAGGAGGAGA    240
ACCGCGCCCT CCGCAGGCAG CTCAGCCTGG CCCAGGGCCG AGCCCCACCC ATCTCGAG    299
```

(2) INFORMATION FOR SEQ ID NO:325:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 292 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:325:

```
GAATTCGGCC TTCATGGCCT ACTCCAACT CATGCCCTTG TTTTATCTC TGCCCTTGGA    60
TGCTGTCTT CTATTTTCAC TCACAATTTC AACACATTTT GACTTGCTCG TGTCACCTAG    120
GGTTTCCGCC TCAGGTATGT CTTCTTCCTT AATTCTTTG CCGTCTTTGG TGCTGTTGAC    180
CTCACCCTTT CTGGGGTCTT CCTATTGGTC TCAGCTTCAG GTTGCAGCC GCCCCTGGTT    240
TCCTGAACAT TCCTTCTGTG GGGTCTTCCC CTCCTTCTCA CCCACCCTCG AG    292
```

(2) INFORMATION FOR SEQ ID NO:326:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 345 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:326:

GAATTCGGCC	TTCAGACTTG	AAGTGGAGAA	GGCTACGATT	TTTTTGATGT	CATTTTGTGT	60
AAGGGCGCAG	ACTGCTGCCA	ACAGAGTGGT	GATAGCGCCT	AAGCATAGTG	TTAGAGTTTG	120
GATTAGTGGG	CTATTTTCTG	CTAGGGGGTG	GAAGCGGATG	AGTAAGAAGA	TTCTGCTAC	180
AACTATAGTG	CTTGAGTGGA	GTAGGGCTGA	GACTGGGGTG	GGGCCTTCTA	TGGCTGAGGG	240
GAGTCAGGGG	TGGAGACCTA	ATTGGGCTGA	TTTGCTGCT	GCTGCTAGGA	GGAGGCCTAG	300
TAGTGGGGTG	AGGCTTGGAT	TAGCGTTTAG	AAGGGCAAAC	TCGAG		345

(2) INFORMATION FOR SEQ ID NO:327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:327:

GAATTCGGCC	TTTCATGNCCT	ACCTTTCCGT	CCGTTCTTTC	ACGCCTTCCT	CCTCATTTTC	60
CTTCCTTCTA	TTTTCCCTTC	CCTCTTTCCG	CTTTCCTGCC	CCGTTTCCTT	CCTCCCTCCC	120
TTCTCTCCTC	CTTCCTTCCT	CTGCGTTCTT	CCTCTCTCCT	TTGTTCCTTC	CTCCTCCTCC	180
CCACTCCCTT	TTCTCTCCT	CTTCCCACCC	CAGTCTCCTA	CTCCCCAGTC	CTCCCATCCC	240
CATGGAACAT	ACACCTGCTT	TGTCTGGGAG	CCACGTTATT	CCTGCCAGCC	AGACCTTGGC	300
CAGGAGGATC	AGGGTCACGG	TCAGCTTGGG	CCGAGAACCC	TTACATGAG	ACAAGCTCCT	360
CTGCCAGGGT	TTCTGTGGG	AAAGGCCCCA	CTTCCCGACC	CTCCTGGGCC	ACTGCATGGG	420
GTCCCCCTCT	CGGCTTCTTC	TCCCCTCTCC	ACCCGGCAGC	CCCCCAGCT	CGAG	474

(2) INFORMATION FOR SEQ ID NO:328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:328:

GAATTCGGCC	AAAGAGGCCT	AATTACTCC	CCAATATAAA	ACATTTTACC	TGCGATCTAT	60
GTGTACATAT	TGAATGATGT	GTAACAATAT	CATAATTTT	ATGTTCTGCA	TTTTTTCAC	120
TATATATCTT	TATTTAAATG	GACTTAACTT	TACTAATGGA	GTAATTTT	GCTTTCAGAA	180
GGAGTTCTCA	CTCGAAGATA	AAGAACAGCT	CGCTAACCC	GAAAGAGGAA	TCGATGCTCA	240
GCTTTTAGTT	GCACTTCTTA	AAGTTGCAGA	ATTAAGACAA	ATCTTTGAAC	CAAAGAAGAA	300
AGAATTCTTA	GAAATGAAAA	GAAAAGAAAG	AATTGCCAGG	CGCCTGGAAG	GGATTGAAAA	360
TGACACTCAG	CCCATCCTCT	TGCAGAGCTG	CACAGGATTG	GTGACTCACC	GCCTGCTGGA	420
GGAAGACACC	CCTCGATACA	TGAGAGCCAG	CGACCCTGCC	AGCCCCCACA	TCGGCCGATC	480
AAATGAAGAG	GAGGAAACTT	CTGATTCTTC	TCTAGAAAAG	CAAACCTCGAT	CCAAATACTG	540
CACAGAAACC	CTCGAG					556

(2) INFORMATION FOR SEQ ID NO:329:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:329:

GAATTCGGCC	AAAGAGGCCT	ACAAAACCAT	CCATAAATAA	ACAAAGCTAA	GAAAGCTAAG	60
AAACAAAGCT	AAGAAACAAA	GACTGAGGTG	AGGGAGATTT	GAGTATTTTT	TTTCCTCTA	120
CCAACAAGTG	AAGAATTGAA	CACCTTAATC	CATCTGATCT	CCCAGGTGGA	AGCCACAAAT	180
CTTTTTTTTT	GTTTGTCTCA	GCATATTGGC	ACAGTGAGAA	ATTCATTTTA	TACTCTCTGG	240
CATCTCTCTT	GTAAACTCAC	CAAGTCTCAA	TAAGTTCACA	AAGAAGGCAG	AGACAAATAA	300
CCCTAGAATG	CAGGTGATTG	TTATTTATG	TATTTTCCTT	GTTACATACC	CACCTATACC	360
CAAGGCCTTT	GCAGAAAAGC	TCGAG				385

(2) INFORMATION FOR SEQ ID NO:330:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 696 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:330:

GAATTCGGCC	AAAGAGGCCT	AGGAAGCAGG	AGTTTATTTT	TATCCTTTTG	TAAGTATTAA	60
CTCGGTAATC	ACAACAAACA	CGGAGCAATC	TCAATGCTGT	TTATCCGGAG	GACAGTCTGC	120
GGGGTCGTGA	CGATTCTTTT	CTTCTTGAAG	TTTTTCCTTT	TCCTGAATCT	CATAATGATT	180
CTTGGCCATG	ATTCTGTCTT	TTCAATGACT	GTGGCTTCTA	CTCGAACAAG	ATCCTTTCCG	240
AGGAGTGGCT	TGCCAAGCAG	CGTGAAGTTG	TCTGCCCCAA	CCAGCAGGAC	CTTCTCCAGT	300
CGAATTCTCT	CTCCACACGC	AAGGTCTAGT	TCATTTCCAA	TTAAGATCAG	GTCTTCAGAG	360
GTCACTTCC	ACTGGCGGCT	GGCAAAGTGC	ACCACGGCAA	AGAGCCTGCC	ATACTGCCCC	420
GTGACGATCA	TCTCATTAC	TTTCTTCACG	ACCTCTGCAT	GGTGTCTGGT	CTCCTCAACT	480
GGGTCTGGCA	GAACAACTTC	TGGCCAAGGT	GGTGAATCA	GGGATGTTTT	AGGAACATAT	540
CCTGGTAGAT	ATGAAGTGCT	CTGTGAATTG	AACCTTCGAG	AAGCAGACCA	AAGGGAGGCT	600
GCTCCGGGCC	CCGAAGGTCT	CAGGATGCTG	TGGCTGCACG	CGGACGCCAG	CCGCCCTAAG	660
GTGACCGTCA	GGGAAGATGC	TGCCATGGCC	GCCGCC			696

(2) INFORMATION FOR SEQ ID NO:331:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 378 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:331:

GAATTCGGCC	AAAGAGGCCT	AATTTTGT	ACATCTGGGC	CCTTAGTTTT	TATTCTGTTT	60
ATTATATGTC	TCTGTCTCTC	TCTATTGTGT	GTGTGTGTGT	GTGTGTGTGT	GTGTGTGTGT	120
GTGTGTGTGT	GTGGTGAGG	AGTGCCACCC	CCAGGGCCCT	GTCAACCTCT	CTTTTCTCCT	180
CCATGGCTGT	CTGCCTGCGT	ATCTGTCTCT	GAGAATCCTC	GGGGCGGTCA	GGGGATGTCA	240
GGAGGGGAAG	GAGCCGCCCT	CCCTATCTTG	CTGCTCCTCT	TGGCACTCAG	GGGCACCTTC	300
CATGGAGCCA	GACCGGTGG	AGGGGCTTCT	GGGATTGGT	GTCTGCTGCT	GCCAGAGCAG	360

GAACCCCCAG TACTCGAG

378

(2) INFORMATION FOR SEQ ID NO:332:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:332:

GAATTCGGCC	TTCATGGCCT	ACATTGGGAT	TATTGGTGCT	GTGACCATGG	CTGGCATCAT	60
GGCGGCAGAC	AGAAGTGAAT	CACCTAGTTT	GACCCAAGAG	AGAGCCAACC	TGAGCGATGA	120
GCAGTGCACA	CAGGTGACCT	CCTTGTTGCA	GTTGGTTCAT	TCCTGCAGTG	AGCAGTCTCC	180
TCAGGCCTCT	GCACTTTACT	ATGATGAATT	TGCCAACCTG	ATCCAACATG	AAAAGCTGGA	240
TCCAAAAGCC	CTGGAATGGG	TTGGGCATAC	CATCTGTAAT	GATTTCCAGG	ATGCCTTCGT	300
AGTGGACTCC	TGTGTTGTTC	CGGAAGGTGA	CTTCCATTT	CCTGTGAAAG	CACTGTACGG	360
ACTGGAAGAA	TACGACACTC	AGGATGGACT	CGAG			394

(2) INFORMATION FOR SEQ ID NO:333:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 547 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:333:

GAATTCGGCC	AAAGAGGCCT	ACTTATTTTC	CTGTGAAAAT	GCCTACCACA	AAGAAGACAT	60
TGATGTTCTT	ATCAAGCTTT	TTCACCAGCC	TTGGGTCCTT	CATTGTAATT	TGCTCTATTC	120
TTGGGACACA	AGCATGGATC	ACCAGTACAA	TTGCTGTTAG	AGACTCTGCT	TCAAATGGGA	180
GCATTTTCAT	CACTTACGGA	CTTTTTCGTG	GGGAGAGTAG	TGAAGAATTG	AGTCACGGAC	240
TTGCAGAACC	AAAGAAAAAG	TTTGCACTTT	TAGAGATACT	GAATAATTCT	TCCCAAAAAA	300
ACTCTGCATT	CGGTGACTAT	CCTGTTCTCT	GTCCTGAGTT	TGATCACGTC	GCTGCTGAGC	360
TCTGGGTTTA	CCTTCTACAA	CAGCATCAGC	AACCCTTACC	AGACATTCCCT	GGGGCCGACG	420
GGGGTGTA	CCTGGAACGG	GCTCGGTGCA	TCCTTCGTTT	TTGTGACCAT	GATACTGTTT	480
GTGGCGAACA	CGCAGTCCAA	CCAACTCTCC	GAAGAGTTGT	TCAAATGCT	TTACCCGACT	540
CCTCGAG						547

(2) INFORMATION FOR SEQ ID NO:334:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:334:

GAATTCGGCC	TTCATGGCCT	AGGGGAAATT	GAGTCAAGAA	AAGGTTCAAT	ATTTTTTAAT	60
GGTAGAATTG	ACCGTATGTG	TATGTGCTTC	TAGAAGTGAT	TCAGGAGAGA	GGGTGGAATG	120

GATGGTGTGG	GACGGAGGGA	AGAATTGGTG	GAATGATGTT	GGCAAAAAGG	AATAGGCTTT	180
TGTGCATAAG	TTGAGGGATT	GGCCTTGCCT	AGAAACATGG	ACAATTCGTC	TATAGTAAGA	240
AGAGAAAAGG	TAGATCTATG	ACCACAGACA	TAGTCAGATA	ATCATTTTAA	AATTCTTTAA	300
TCAATAGATG	TTTCTGATGT	ATGGCAGGCA	GTAAGCTAAG	CAGTTTACAT	ACCTGATTTC	360
ATTTAGTTAT	TATAACAATC	CCAGTCTAAA	ACTCGAG			397

(2) INFORMATION FOR SEQ ID NO:335:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:335:

GAATTCGGCC	TTCATGGCCT	ACTCCATCCT	TAAGGTCACC	ATTGGTATGT	TCCTGCTCTC	60
TGGAGATCCC	TGCTTCAAGA	CGCCACCATC	GACTGCCAAG	TCCATCTCCA	TCCCAGGCCA	120
GGATTCCTCC	CTGCAGCTGA	CGTGTAAGGG	TGGTGGGACC	AGCAGTGGGG	GCAGCAGCAC	180
CAACTCCCTG	ACTGGGTCCC	GGCCCCCACC	GGCTCGGCCC	ACTATTCTCA	GCTCAGGGCT	240
GCCAGAGGAA	CCCGACCAGA	ACCTGTCCAG	CCCTGAGGAG	GTGTTCCACT	CTGGCCACTC	300
CTCGCAACTC	GAG					313

(2) INFORMATION FOR SEQ ID NO:336:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:336:

GAATTCGGCC	AAAGAGGCCT	AGATTGAATT	CTAGACCTGC	CTCGGCCTCC	CAAAGTGCTG	60
GGATTACAGG	CTTGAGCCAC	CACACCTGGC	CTAGTGATTT	GTAATTTTCAT	GAGCTGTTGC	120
TGTATTGCCT	TCCACAGACA	GTCAATTAT	AATCCCTCAG	TATTATATAA	TCAGGAAGAT	180
TCAGTGAATG	GAATTTTGGG	TTGGTGGAGG	ACATATTTT	TAATTGGTAG	ACCACTGAGT	240
GCTTTTGCAA	ATCTCCTTAA	ATCACATTAC	AGCAGGAACA	ACTATAGAAA	ATACAATTAT	300
TTAGGAGCAA	CCTGATCTGT	GAGCTAATTT	AATGAGTGGA	GCCCAGCCTA	CATGCTGAAG	360
AGCTCACATG	CCTCCTACCT	AGTTCCTTAA	CTAGGTTTTC	ACTCATGCCC	ATTTGTGCAT	420
ACTCTTGAAA	CCTTCTATC	TTGCATAGA	ACATTATTCT	TTCCACT		467

(2) INFORMATION FOR SEQ ID NO:337:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:337:

GAATTCGGCC	AAAGAGGCCT	ACTTCTTTGA	AGAACCATGA	AGTCACACTA	TATTGTGCTA	60
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GCTCTAGCCT	CCCTGACGTT	CCTGCTGTGT	CTCCCCGTGT	CCCAGAGCTG	TAACAAAGCA	120
CTCTGTGCCA	GCGATGTGAG	CAAATGCCTC	ATTCAGGAGC	TCTGCCAGTG	CCGGCCTGGA	180
GAAGGGAACT	GCCCCTGCTG	TAAGGAGTGC	ATGCTGTGCC	TCGGGGCCCT	GTGGGACGAG	240
TGCTGCGACT	GTGTCGGTAT	GTGCAACCTT	CGGAATTACA	GCGACACCCC	GCCCACATCC	300
AAGAGCACCG	TGGAGGAGCT	GCACGAGCCC	ATTCCGTCCG	CTGTTCGAG		348

(2) INFORMATION FOR SEQ ID NO:338:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:338:

GAATTCGGCC	TTCATGGCCT	AGCCAGTCTT	CAGTTATAAC	CACTCCACCC	TCCTCACTTT	60
CTCTCTCTCT	CTCTCTTTTT	TTTTTTTTTT	TTTTTTGCTA	TGGGATTTAA	TGGGAAAAAT	120
ATGTAAAAAC	TGTCAGTAGT	CAGCTGGCTC	TTTTTCCTAT	GAAATCTATC	AGTACCTTTC	180
TCCATCCGTT	GTCTCAATA	ATGACCACAG	AGCCTGAGTA	TACCAAGAAA	ACCAATATTC	240
GCATTACAGG	TCACTCGAG					259

(2) INFORMATION FOR SEQ ID NO:339:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 183 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:339:

GAATTCGGCC	AAAGAGGCCT	AGCCTTCTGC	AAGATGCTTC	TGATTCTGCT	GTCAGTGGCC	60
CTGCTGGCCT	TCAGCTCAGC	TCAGGACTTA	GATGAAGATG	TCAGCCAAGA	AGACGTTCCC	120
TTGGTAATAT	CAGATGGAGG	AGACTCTGAG	CAGTTCATAG	ATGAGGAGCG	TCAGGGACCA	180
CCT						183

(2) INFORMATION FOR SEQ ID NO:340:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:340:

GAATTCGGCC	TTCATGGCCT	AGTTTAACT	GAGTGCAACA	AGTATTTTCG	TTAAGAGATT	60
TTTTTTCGTA	ATTTACCATT	CTGCTGAATC	AATTTTAAAT	CCAGTTGGAA	GCTCTAAAAT	120
TCTAACATAA	TTCAGAAGCA	TTAAAAAAGA	AGACTAAGGA	AGAGAAAGCT	ACATTTTTAT	180
TTGAGCTTGT	ATTGCATTGT	GCAGAAAGGA	AAATAGTCTA	GCTAATTTAC	TTTCCTATG	240
AAAAACCTTA	GAAGGCTCCT	CGAG				264

(2) INFORMATION FOR SEQ ID NO:341:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:341:

```

GAATTCGGCC TTCATGGCCT AGCCTTTCTA GTCTTCCCTC TTCTGTAGGA ATANCATGTT      60
CCTCAAATGG TCCTGAACCT TTTCACCATT TTGGTGAACC CTTTAAAGT AAATTTACTC      120
AATGCTTTAA AATTCATAGT CTTAAAATAA ATGTGAATTT TGTTCACAGG TATTTATTCT      180
GGGGTACAAA AACTTCCCAG AATTTACAGT AGGAAAGGAA ACCCCTTTAT GATGTGGCTT      240
ATTATTACAA GCATTAGAGG ATGATGCTGG CTAAGTCAAA TCATTCCTTG AGACAGTGAT      300
TCCTAAATGT AATGCCGCTC TCCTGAACCT TCACATATTC TATATCATGG TTATTTTAAA      360
AAATATATTT TTAGCCTTTT GTAACCTTAG TCTGTTTTTG AGCAATCTCG AG              412

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(2) INFORMATION FOR SEQ ID NO:342:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:342:

```

GAATTCGGCC TTCATGGCCT AGGGATTATA GGTGTGAGCC ACCGCGCCCG GCCAGGAATC      60
ATTTTATCC AGGTAAGGCA TACAGAACCG GAGGGTTCTT GTCTAAGTTG TACCATGAAT      120
GTGTGCTCAG TGGCTACTTT GAAATAGACT TACTGTACAA TCCCTGAGCA GGAATGAAAA      180
TAAAAGCTGG AAATCACGGG TTGCTCTGGG GTTTTCAGGA AGGTGTCGTC CGTCTGGGGT      240
GAGTGTCTTC CTTTCTCANG GGATTTCATG TGGCATTATT TTGTTTTCAT CTGAGAGGCA      300
ACATAAGCTG GGAGGGAAGG GCTGCAAAGA GGGGGCCAGG ACAAATGTGT ACCTGGGGGC      360
CCCCATTTTG ACTCCACCCT GAGCTGGGGC TGGGCCACAG GAGGGCAGAG GGAACACTTT      420
GGGACGGGGA GGGAGCCCCT GGACTGAAAG AATGGGGTGA CTCGAG              466

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(2) INFORMATION FOR SEQ ID NO:343:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:343:

```

GAATTCGGCC TTCATGGCCT AGAATTTTGG AGTCTTTATC ATAGGTAACC TGGACCACAG      60
TTACTATTTA TTGACAATGT GATTGAGTGT ATGGAGGAAA GCACAGTGGG TGCTAGGCTT      120
TGTAATATAG GGGATGTAGA AAAGCAGATA GTTCAGTGTC TACCTTTTTC TAGAACTACC      180
TTGAACCTTA AATTTTAAAGT CATGTTTCATT GCTAGAAAAT TAAATGTACT TATTTAAACC      240
AATGAAAAAG CACATTCTTG AAATGAAGTT AGAGATAATC TCTGTGTCTT ATAAAAAGAC      300
ATTAATAAAA ATCTGGTAAG GACTCGAG              328

```

(2) INFORMATION FOR SEQ ID NO:344:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:344:

```

GAATTCGGCC TTCATGGCCT AGTGACCAGA CATAAGAACT CATTTTGTAGT TAAAGCATTT      60
TAAAAAAGTA TACAAGGCAG AGTTGCAAAC AATCTCAGCC TATGAAAAGG ACAGCTGCAG      120
TCAATGTTCC CACTAATATT TTCCATCCGT GTACTGAGTG AATTGTGAAT GTGCAACTCA      180
TGTCAGAGAA ATAAACAGAT GTGCACCACA AGCGGAACAA CAATGAAAGA ACTTACATAG      240
ATTTTATATA AGATTGAACT TTTGATGTTG ATTCCACTGG TAAGAGAGCA CTGTAGGCAA      300
AGGTCTTGTA TTTATAAGT TATCTCCTAT TGAGGAAGAT GAAGATGTCA ATACTCCCCA      360
ACAGAATGCT TTGAGCTCTT TCTAGTAGAT CTGTGCCAAC TCTGAAACAC CTCGAG      416

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(2) INFORMATION FOR SEQ ID NO:345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:345:

```

GAATTCGGCC TTCATGGCCT AGTAAATACA AAATACAAAA ATACTGGTGA GAGAATGGGA      60
TGATGATTAT ATTCCTGGTT CAGTTTTTCT TCCTGAGAAA TTTGATAATA CATCTTTTGA      120
TTTTTAATAA GTGAAATAAC TGGTGAAGTG GTTGATATGT TGTGTGTGTG TTTTTTTTTT      180
TTTTTTTAAA TAGAAGTGTG AAAAGAACT TCATCCACGG AAACCTCAGG ATAATTTTGA      240
AACAGGCAAG TCATTTCTTA TCTTTTATA ATCTCTGCCT TGTGGGATTT GGTGTGTTT      300
ACCTAACTTT GATTTTAGTG GGAGTATGTG AGCTGTGACT CGAG      344

```

(2) INFORMATION FOR SEQ ID NO:346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:346:

```

GAATTCGGCC TTCATGGCCT AGCCTTCGGA ACCCCACCAG AGTCACAGCC AGGAAGGGCA      60
GCGGGGCGCA CCAGGCCGAA GGCTCACGCC ACAGGGAGGG CAGCTAGGAC ATGGGGGGAA      120
GCGCGTTAAA CCAGGGAGTC CTGGAAGGGG ACGACGCCCC CGGCCAGTCC CTGTACGAGC      180
GGTTAAGTCA GAGGATGCTG GACATCTCGG GGGACCGGGG CGTGCTGAAG GACGTCATCC      240
GAGAAGGAGC TGGAGACCTA GTGGCGCCTG ATGCTTCGGT GCTAGATGCT TCGTCTTGGG      300
TAACTCCTC GACTCCCAAG GCCCCAGCTC CATCTTTACC TCAGAGCCTC CTGAACCTCC      360
TCCTCCAGCC TCACCTTCCT CCAGCCTCAC CACTCCTCCC TGGACCTGCA GCTCCGCACC      420
CCCGGGGGCC TCAGAACTAC CCCTTCCAGG GCCTCAGAAC TACCCCTACG GTTTCTCCTG      480

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CGTAACCTTC TGCCTACCTT CCTGAGAGTG GTTGGTGACA GCAGCCGGGG CTAGAAACCT 540
CGAG 544

(2) INFORMATION FOR SEQ ID NO:347:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 570 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:347:

GCCTTCATGG CCTACCCAGT GATTGTCACC ATGGCCAGCA AGAGGAAATC CACCACACCA 60
TGCATGATCC CAGTGAAGAC TGTGGTGTG CAAGATGCCA GCATGGAGGC CCAGCCCGCT 120
GAGACCTTGC CTGAAGGACC CCAGCAGGAT CTGCCCCCAG AAGCATCTGC TGCCAGCAGT 180
GAGGCAGCAC AGAACCCCCAG CAGTACTGAT GGCTCTACAC TGGCCAATGG GCATCGGAGC 240
ACTTTAGATG GCTATTTATA TTCCTGTAAA TACTGCGATT TCAGATCCCA TGACATGACC 300
CAATTTGTGG GACATATGAA CTCAGAGCAC ACAGACTTTA ATAAAGACCC AACCTTTGTA 360
TGCAAGTGGGT GCAGTTTTCT GGCAAAAACC CCTGAGGGGC TTTCCTTGCA CAATGCCACA 420
TGTCACTCCG GGAAGCCAG CTTTGTGTGG AACGTGGCCA AGCCAGACAA TCATGTGGTT 480
GTGGAGCAGA GCATCCCTGA GAGCACCAGC ACTCCTGACC TAGCGGGTGA GCCCAGTGCT 540
GAAGGGGCTG ATGGACAGGC AGAGCTCGAG 570

(2) INFORMATION FOR SEQ ID NO:348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:348:

GAATTCGGCC TTCATGGCCT AGAAAAAGT TTTCAAAGGG AAGTAATCTT AAATCTGTAT 60
ACTATTTTCT ATGATGGAAA TTCTGTGAAG AAACAATAAC AAATCTCTCC TGACTCCTGT 120
CTGTCCTAAT AGTAAGGTGG TCTTTCTTCT AATCTCCCA TCCATCCACC CATCAGGAAG 180
CAACAGGGTA CCTTGTGTGA GTAAGTGTAG ATTTCTGACT TCTTCTCGCA CCTTCAGCTG 240
GAGCACCTGT TGTAAGATGT GCTGCCGAG GTTCTCCTGG GCAATCCCCA TTCGCTCGAG 300

(2) INFORMATION FOR SEQ ID NO:349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:349:

GAATTCGCCC TTCATGGCCT AACCAACCACC ACCACCTGGA CGCCAGCAG CACAACCACC 60
ATAGCCGGCC TCAGGGTCAC AGAAAGCAAA GGGCACTCAG AATCATGGCA CCTAAGTCTG 120
GACACTGCCA TCAGGGTTGC ATTGGCTGTC GCTGTGCTCA AAAGTGTCT TTTGGGACTG 180

CTGTGCCTCC TCCTGTGGTG GAGGAGAAGG AAAGGTAGCA GGGCGCCAAG CAGTGACTTC	240
TGACCAACAG AGTGTGGGGA GAAGGGATGT GTATTAGCCC CGGAGGACGT GATGTGAGAC	300
CCGCTTGTA GTCCTCCACA CTCGTTCCCC ATTGGCAAGA TACATGGAGA GCACCTGAG	360
GACCTTTAAA AGGCAAAGCC GCAAGGCAGA AGGAGGCTGG GTCCCTGAAT CACCGACGCT	420
CGAG	424

(2) INFORMATION FOR SEQ ID NO:350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:350:

GAATTCGGCC TTCATGGCCT AATTAGATTA TTTTGAGCTT GGGAACTT GTACATGGTT	60
CCCCGGGACA TAAATGTAGA AGTCTGTAG AGCAGTATCT TCACATTGAG GGATGTGAAG	120
GCTTTGCAGA GTATAGATAG TTTAATGTAA TTTAGAGTTC TTCATTATCT TTCCTAGGAT	180
CAGATATCTG CCGATGATGA CTTCTAACCC ATTCAGAATC TTTCTATGGT ATATTGCCCT	240
GGGGTGTAAT ATCCTCCAGG ACCCTAAACA GATGGACAGT TGATGCATT CAGGTAAGC	300
TGTAGACAAC AATATATTTG ACCCTGAAA CAATTCAGTA TGCTTGTCAT TTGTAACTA	360
GAGTTATTTT AAACATAAT TTGAATAAAA AATAAATTTT AATAAATACA TGTCCCAAT	420
TATGCATATA AAAGCAATCC TCGAG	445

(2) INFORMATION FOR SEQ ID NO:351:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:351:

AATTCGGTTC ATGGCCTAAT TTTGGAATA AGAGACAGAT TTTTGTTTTT TGTTTTTTTA	60
AATAGCTGTT AACTAGTCTC ATAAGGACAA AATACAGAAA GACAGTTCCT ACAGAGAAAT	120
AGAAGCAAAA AAAGGAACCA ATGGAAAATT TAAACTGAA AAATAGAATA TCTGAAATAA	180
AAAATTCAT AGATGACATA ACTGTTGAGG AAAGAGTATG TGAATTTGAA GAAAGAGCAA	240
TAGAAATGTT CCATTGTAAA GAACAAAGAG AACTCGAG	278

(2) INFORMATION FOR SEQ ID NO:352:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:352:

GAATTCGCCT TCATGGCCTA CAGATTATCT TACACTGAAC TGATCAAGTA CTTTGAAAAT	60
GACTTCGAAA TTTATCTTGG TGTCTTCAT ACTTGCTGCA CTGAGTCTTT CAACCACCTT	120

TTCTCTCCAA	CCAGACCAGC	AAAAGGTTCT	ACTAGTTTCT	TTTGATGGAT	TCCGTTGGGA	180
TTACTTATAT	AAAGTTCCAA	CGCCCCATTT	TCATTATATT	ATGAAATATG	GTGTTCACGT	240
GAAGCAAGTT	ACTAATGTTT	TTATTACAAA	AACCTACCCT	AACCATTATA	CTTTGGTAAC	300
TGGCCTCTTT	GCAGAGAATC	ATGGGATTGT	TGCAAAATGAT	ATGTTTGATC	CTATTCGGAA	360
CAAATCTTTC	TCCTTGGATC	ACATGAATAT	TTATGATTCC	AAGTTTGGG	AAGAAGCGAC	420
ACCAATATGG	ATCACAAACC	AGATGGCAGG	ACTCGAG			457

(2) INFORMATION FOR SEQ ID NO:353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:353:

GAATTCGGCC	TTATGGCCTA	GCAGGCGCCA	AGGTAACATG	AACAAACAGC	TGCTTGCTGC	60
CCCCAAGCTT	TAGTTTCTAG	TGGGCCTGGA	GCAATTGTGA	AGGACAACCT	CACCCAAGGC	120
CCAGTATTGA	AGAGGGGTAG	GGTGGGAGGA	TTGTACATAT	CGCGAACGCT	TGGCAAATCT	180
CTAGATTTTT	TTTCCTCCTA	GGAAATAATA	ATTTTAAAAA	AGGCTTGTA	AAAATAATAA	240
AATGTTTCAT	GACAGCAGCA	GATGTAAAC	TCCAGTACT	CCGGGCGACC	TCGAG	295

(2) INFORMATION FOR SEQ ID NO:354:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:354:

GCCTAGACAT	GATGGTGGCC	ACGTGCCAGG	GGACCACACC	CTATGTACAA	AGCAGGAGAA	60
TGATGCTCCC	AGCTGAGCTG	CAGGATGGGC	GCTGGGCTGA	CTGGAGGGGT	AGACGGGGTG	120
GGGTCTGACC	CCATTAGCCT	TTCCCCATCC	AACCTGGGCC	CCCATAAGCC	ATTCTCTGGC	180
CCTCTGCACA	AGACAGACTC	AGCAAATCTG	CGAGGTATGG	GGATTCTGCC	AACTCCCCAC	240
CTCGCCTCAC	CTTCCCTAGG	TCTGCGCGTT	AGGAGATTCT	GGAGCCAGAG	GGAGAGACCC	300
CAGAACTCC	CCGGTCGGCG	ACCCAGCCCC	AGACGCCTGG	GGTCCCAAGG	GAAGCTGAAC	360
GCCCCGAGAA	TGGGGAAATG	GAGAGAGAAC	CTGAAAGAGC	CCCTGTAAC	CGAG	414

(2) INFORMATION FOR SEQ ID NO:355:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:355:

GAATTCGGCC	ATCATGGCCT	ACTCCCAGT	AGCTGGGACT	ACAGGCATGT	GCCACCACGC	60
CCAGCTAATT	TTTTGTATTT	TTTTTAGTAG	AGATGGGGTT	CCACCATGTT	AGCTAGGATG	120

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ATTTCGATTT CCTGACCTTG TGATCCGCCC GCCTCGGCCT CCCAAATGC TGGGATTATA      180
GGTGTGAGCC ACCACGTGGC CTCATTTTCAT TCTTTCATGT GGATAGGCAG TTGTTCCAGA      240
AGTATATAGT GAGGAGCTTC TTCTTTCTCT AATGATCTGC AATGTCACCT TCATCATTTA      300
TGAAGGTTGC ACATATACAT GGGGAATTTT TAGTCTGGCA TTAAATGTTC TTCAAAAGAG      360
TTCCTGCAAA CGTTTTTGT TTTATTCCT ACTGTTCCCT TCACGTACTC TCTACTGAAC      420
TAAACTCTCT AATGTGTCTC GAG                                         443

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(2) INFORMATION FOR SEQ ID NO:356:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:356:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCTC AAGAGCAGCC CACCTGTTCA GTATTCATAC      60
CCACATATCC ATAATAGAGC TCTTCTCTC CCCCGGGTTC CTCTGCCTCA GCCTTTTCCT      120
CTTAGCAGAT GCCATCTGCA GGGCCACTTG GCTGCCCGTA GCAGTAACCG CACAGTCTTC      180
CACATTTACT CCCTCAGCCT CAGCTGCTCC TGCAGCCCAG GCACTGTCTC TGTCTCTGCA      240
TTGCTCAAGC CTCCACCATC TCGGTTACAC CCCACAGCCA CTCGAG                      286

```

(2) INFORMATION FOR SEQ ID NO:357:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:357:

```

GAATTCGGCC TTCATGGCCT ACTGCCTTAG CCTCCCAAAG TGCTGGGATT ACAGGCGTGA      60
GCCACCATGC CCAGCCCTAT AGTAGTTCTT CTTTGGCCCC TTAATATCCT CACCCACATG      120
TCCTGTACCC TGCTGAACC CTCTCCTCT TTTGTTCTG ATCTTTGAGC TCCCTAGAGC      180
CCATAATTCT TTAGAGCAGG TATGTCCCGA GTCTGAAACA TGCCCTTATT TGTCCTAAGC      240
TCTGGACATT TCTACCCCA TCTCTCGAG                                         269

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(2) INFORMATION FOR SEQ ID NO:358:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:358:

```

GAATTCGGCC TTCATGGCCT ACCAAGGAAG CCTTCTGTT TTTGGCCCAA GGAGCGTCAA      60
TAAGATCTTT GAAAATACTT TGAAGTCATT TTGTGTGTGT GTATGTGCAT ACACACCTGA      120
TTTGTTTTAT TTTTATTTT TATTTTGTGA GTTAGGGTCT GGCTCTGTCG TCCAGGCTAG      180
AGTGCACTGG TGTGGTCTCA GCTCACTGCA ACCTCTGCCT CCCAGGCTCA AGCCGCCCCC      240

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CCACCTCGAG

250

(2) INFORMATION FOR SEQ ID NO:359:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:359:

GAATTCGGCC TTCATGGCCT AATGGGAGAT TGGTGGGAGT AGGGAACACA AAAGGCATGG	60
GAAAAGAAGA TAGGTTGTAT TTTGGTCATA CTGACACCAA CATGCCTAAA GGATAGCCCT	120
GTGAAAAAAG CTAGCAGACA GTTGAAGTGC GGCTGTGAAA CAGGAAGCCG TGAGGGCTAG	180
ACTCATCGTT GTAGTCATTC GTAAAGAGTA AATACTTGGA GCTATTGTAG TAGATGGTAT	240
CACCACGGAA CACTCGAG	258

(2) INFORMATION FOR SEQ ID NO:360:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:360:

GAATTCGGCC TTCATGGCCT AGGAAGCCAC AGGTCGGCTC TGCATTAGCA GGAGCAGCCG	60
CCCTCGCTGG CCGGGGGCTC CTGGGGTTTG TCCAGCTTGA TGTCGATCAT CCCTTCTTTG	120
CTTTTCTCCT GGACATTCTC CATTCCGGGT AGAGCCGACG CCACACGTCG AAAAAGCTGC	180
TTCACGTTGT AGCCAGTCTT CGCACTGGTC TCAATGAACA TGACGCTCAG TTCTTTGGCG	240
CGCTGCCCCC CCCCTCGAG	259

(2) INFORMATION FOR SEQ ID NO:361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:361:

GAATTCGGCC TTCATGGCCT AAAGATTAGC CTGGGTAACA TAGTGAGACC CTGTCTCTAT	60
TAAAAAATAA TAATAAAAT AACATTCACA TTGGTATTGT TCACTAAGGT ATTGGTTGTT	120
AAGGCATTCA TTAAGGTATT GTTAAACTT GTGTTAAGCA TGTAAAGTC TCAGTAACTT	180
TGGGATAGAA ATAAATGTG ATAAAAAGCT GAAAGAAACC ACCACAAGGG AGAGTCCTTT	240
TTGAAATATT AGAGACATAA TGCTGTCTAA TAAAAACGA CATCAAAGAA AAACACACT	300
ACAGTGACTG CAGACTTAAT GTTGGCCAAC CATGCATCCT CCCTAGAAAT GCATTTGAAT	360
TTGATTACT AATCTTTTAT TTAGGAAATT TACATTTTTA CATTAGTGAG ATTGGCCTCG	420
AG	422

(2) INFORMATION FOR SEQ ID NO:362:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:362:

```

GAATTCGGCC TTCATGGCCT AGTTATTCTT CTAATAGCTC AGCTACTTTT CCTTAAATA      60
TCTTTTCTC  TGCAAAGCCT TCATATAATT GTTGTTATTA TAACAGTGAT GATGACTGCC      120
ACTCATTACA ACTGCTGTTG TTAATCTTTG TTGTTATTTT AAACCATATG TTATTTAAAC      180
CATAAACTGC ATCATAAAAG CAGTTTCTTT CTAATCCATG ATGACACCTG CTAGCCAGGT      240
ATCGTATCAA TTCTTCACAG GTCTATTGAA TTCTAGACCT GCCTCGAG      288

```

(2) INFORMATION FOR SEQ ID NO:363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:363:

```

AAAAATTTCA ACAAATCCTG AAGTCTTTCT GTGAAGTGAC CAGTTCTGAA CTTTGAAGAT      60
AAATAATTGC TGTAATTCCT TTTTGATTTT CTTTTCCTAG GTTCATGGTC CTTGGTAATT      120
TCATTCATGG AAAAAATCT TATTATAATA ACAACAAAGA TTTGTATATT TTTGACTTTA      180
TATTTCCTGA GCTCTCCTGA CTTTGTGAAA AAGGGTGATG AAAATGCATT CCGAATCTGT      240
GAGGGCCCAA AACAGAGACT CGAG      264

```

(2) INFORMATION FOR SEQ ID NO:364:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:364:

```

GAATTCGGCC TTCATGGCCT AGACCCTCAT CAATAGATGG AGACATACAG AAATAGTCAA      60
ACCACATCTA CAAAATGCCA GTATCAGGCG GCGGCTTCGA AGCCAAAGTG ATGTTTGGAT      120
GTAAAGTGAA ATATTAGTTG GCGGATGAAG CAGATAGTGA GGAAAGTTGA GCCAATAATG      180
ACGTGAAGTC CGTGAAGGCC TGTGGCTACA AAAAATGTTG AGCCGTAGAT GCCGTCGGAA      240
ATGGTGAAGG GAGACTCGAG      260

```

(2) INFORMATION FOR SEQ ID NO:365:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:365:

```
GCGCCTATCA CAAGCAGATC ATGGGTGGCT TCAAGGAGAC GAAGGAGGCT GAAGATGGCT    60
TCCGCAAGGC CCAGAAGCCT TGGGCCAAGA AGATGAAGGA GCTGGAGGCA GCCAAGAAGG    120
CCTACCATTT GGCTTGCAAA GAGGAAAAGC TGGCCATGAC ACGGGAGATG AACAGCAAGA    180
CGGAGCAATC GGTACACCTT GAGCAGCAAA AGAAGCTGCA GGACAAAGTG GACAAAGTGCA    240
AGCAGGATGT GCAGAAGACA CAGGAGAAGT ATGAGAAAGT GCTGGAAGAT GTGGGCAAGA    300
CCACACCCCA GTACATGGAG AACAACTCG AG                                     332
```

(2) INFORMATION FOR SEQ ID NO:366:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:366:

```
GAATTAACAG AGTTTTCAGA ATTAGAATAC TCAGAAATGG GATCATCGTT CAGTGTCTCT    60
CCAAAAGCAG AATCTGCCGT AATAGTAGCA AATCCTAGGG AAGAAATAAT CGTGAAAAAT    120
AAGATGAAG  AAGAGAAGTT AGTTAGTAAT AACATCCTTC ATAATCAACA AGAGTTACCT    180
ACAGCTCTTA CTAAATTGGT TAAAGAGGTT GAAGTTGTGT CTTCAGAAAA AGCAAAAGAC    240
AGTTTTAATG AAAAGAGAGT TGCAGTGGAA GCTCCTATGA GGGAGGAATA TGCAGACTTC    300
AAACCATTG  AGCGAGTATG GGATCTCGAG                                     330
```

(2) INFORMATION FOR SEQ ID NO:367:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 200 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:367:

```
GCGATTGAAT TCTAGACCTG CCTCGAGTAC GGAGCGAAAC TCTGTCTCAA AAAAAAAAAA    60
AAAAAAAAAA ACCGAGTATA AAAGGCATTT TTTTCCTTTA AACTAAGTAA AATATAATGT    120
TGAATAGTTC TATTTTGCTT AACGGGCTTT TGTATTGTGT TTTGTGTAGA AATTGGCATT    180
TTTCACATAG AAATCTCGAG                                     200
```

(2) INFORMATION FOR SEQ ID NO:368:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 368 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:368:

```

GAATTCGGCC TTCATGGCCT AGAGAAATGA GGAAAAAGAA GGAAGAATAT TTAACCTTTA      60
GTCCTCTTAC AGTTGTAATA TTTGTGGTCA TCTGCTGTGT TATGATGGTC TTACTTTATT      120
TCTTCTACAA ATGGTTGGTT TATGTTATGA TAGCAATTTT CTGCATAGCA TCAGCAATGA      180
GTCTGTACAA CTGTCTTGCT GCACTAATTC ATAAGATACC ATATGGACAA TGCACGATTG      240
CATGTCGTGG CAAAAACATG GAAGTGAGAC TTATTTTCT CTCTGGACTG TGCATAGCAG      300
TAGCTGTTGT TTGGGCTGTG TTTCGAAATG AAGACAGGTG GGCTTGGATT TTACAGGATA      360
TTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:369:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:369:

```

GAATTCGGCC TTCATGGCCT ACATTCGGAG AAGTTGAAAG AATTACACCC AGAACACCCA      60
TGTCTACCAT GTTACTACAT TTGTGTGTGT GTGTGTGTGT GTGTGTGTGT GCGTGTGCAA      120
TTTAAATTAC AATGGTCGAG GAAGCTCTTG CTGAGAAGGT GATGTTGAAT AAAGACTCTA      180
AAGACCCTAA AGAGTTGAGA GAGAGCTGTG TGGAGTTCTG GGGCCCAGGC ACAGCAAGTA      240
CAAAGATCCT GAAGCAGGAG CATTCTTGGT GTGTTCAAGG AAAGCAGGAC AACCTCGAG      299

```

(2) INFORMATION FOR SEQ ID NO:370:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:370:

```

GAATTCGGCC TTCATGGCCT ACCGCCTTTC CATTATGCAA CTGTGGTGGC TTTTCTTTTG      60
TTATACGACG ATTATTTGTC AACCCCACTA TCTTTGCACT CAACCATGGG CCCCTGGGC      120
TCAGAGACCT CGTGACAGTC ATCTTCTCAT CACCACATCT GCAAATGTGT GGGTGGATGG      180
GGCAGCAACA GTCCACCTCC TCCAAGAAGC AGTCCCTGAT TTTCTCTCCC CAGACAAATC      240
TTCGTCTCTC TGTCTTGGA AACTCAAAGA ACTAAGCACC TCCCTCGAG      289

```

(2) INFORMATION FOR SEQ ID NO:371:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:371:

AATTCGGCCT	TCATGGCCTA	CAAGCTCGAT	CATTATCCTT	CTGTGAGTTA	CCATCTGCCA	60
AGTTCATCCG	ACACCCTCTT	CAATTCTCCC	AAGTCGCTCT	TTCTGGGAAA	AGTTATAGAA	120
ACAGGGAAAA	TTGACCAAGA	GATTACAAAA	TACAACACCC	CAGGATTCAC	TGGTTGCCTC	180
TCCAGAGTCC	AGTTCAACCA	GATCGCCCCT	CTCAAGGCCG	CCTTGAGGCA	GACAAACGCC	240
TCGGCTCACG	TCCACATCCA	GGGCGAGCTG	GTGGAGTCCA	ACTGCGGGGC	CTCGCCGCTG	300
ACCCCTCTCC	CCATGTCTGC	CGCCACCGAC	CCCTGGCACC	TGGATCACCT	GGATTACAGC	360
AGTGCGGATT	TTCCATATAA	TCCAGGACAA	GGCCAAGCTA	TAAGAAATGG	AGTCAACAGA	420
AACTCGGCTA	TCATTGGAGG	CGTCATTGCT	GTGGTGATTT	TCACCATCCT	GTGCACCCTG	480
GTCTTCCTGA	TCCGGTACAT	GTTCCGCCAC	AAGGGCACCT	ACCATACCAA	CGTTCTCGAG	540

(2) INFORMATION FOR SEQ ID NO:372:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 527 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:372:

TCGACCCCTG	GCTAATGACA	AACATGTGA	CCTTCATGGT	GGGGGAGATT	CTGCTCCTCA	60
TCCTGACCAT	CTGCTCCCTG	GCTGCCATCT	TTCCCCGGGC	CTTTCCTAAG	AAGCTTGTTG	120
CCTTCTCAAC	TTGGATTGAC	CGGACCCGCT	GGGCCAGGAA	CACCTGGGCC	ATGCTCGCCA	180
TCTTCATCCT	GGTGATGGCA	AATGTCGTGG	ACATGCTCAG	CTGTCTCCAG	TACTACACGG	240
GACCCAGCAA	TGCAACGGCA	GGGATGGAAA	CGGAGGGCAG	CTGCCTGGAG	AACCCCAAGT	300
ATTACAATA	TGTGGCCGTG	CTGTCCCTCA	TCGCCACCAT	CATGCTGGTG	CAGGTCAGCC	360
ACATGGTGAA	GCTCAGCTC	ATGCTGCTCG	TCGCAGGCGC	CGTGGCCACC	ATCAACCTCT	420
ATGCTGGCG	TCCCGTCTTT	GATGAATACG	ACCACAAGCG	TTTTCGGGAG	CACGACTTAC	480
CTATGGTGGC	CTTAGAGCAG	ATGCAAGGAT	TCAACCCAGG	GCTCGAG		527

(2) INFORMATION FOR SEQ ID NO:373:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:373:

GGCAAGAAAG	GATGTCCGCA	CAGCTGGCTG	CTGCTGAGAG	CAGACAAAAG	AAGCTGGAAG	60
TGGAGAAGCT	TCAGCTACAA	GCCCTTGAGC	AAGAGCACAA	GAAGCTGGCT	GCCCGCCTTG	120
AGGAAGAGCG	TGGCAAGAAC	AAGCAGGTGG	TCCTGATGCT	GGTCAAAGAG	TGCAAGCAGC	180
TCTCAGGCAA	AGTCATAGAG	GAGGCCCAGA	AGCTCGAAGA	CGTAATGGCC	AAACTGGAAG	240
AGGAAAAGAA	AAAGACGAAT	GAATTAGAAG	AGGAACTCTC	CGCTGAGAAA	CGAAGAAGCA	300
CAGAAATGGA	AGCTCAGATG	GAAAAACAAC	TCTCTGAGTT	TGACACTGAG	CGGGAACAGC	360
TTCTGTGCCAA	GCTGAACCGG	GAAGAAGCAC	ACACCACAAA	CCTCGAG		407

(2) INFORMATION FOR SEQ ID NO:374:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:374:

```

GAATTCGGCC TTCATGGCCT ACTCTGTTTT CTCCCTGGAC TTATGTGCTT CGTCTGGAAT      60
GTTACATCTC TTCCTCTCTT TCTTTTTTTT TGGTCCCCAT GTTGACTGTT TTATTGGGGT      120
TTCTGGATAT CTCGGGGCCA CCTCACAGGA AGCGGTTTGC AATGAGATCA TAAACATTGC      180
CGAAAAATCT GTTCATTACT GCAGCACTGT TTCTCATCCC CTTGACTTTC ATCACAAGGT      240
ATCCCCCTCT GACAATAAAT CATCTTTAAT CATTTCTCAG CAACCTCAAG CCCAGCAGCG      300
AAGAGTCACC CCCTATCTCG AG                                     322

```

(2) INFORMATION FOR SEQ ID NO:375:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:375:

```

GAATTCGGCC AAAGAGGCCT ACCTAAACCG TCGATTGAAT TCTAGACCTG CCCCCAAACC      60
AACAAGGAGA ACAAGCTCAG TCTTCTGTGT CTTAATTTTT GGCTTTACTC TTAGCCCTGC      120
CCCATTTCCCT AGGCTCTCCA CAGTCCAGCC GCTTTGAGCT ACTTTTCCTT CCCTGATATG      180
TGCAGCTCTC TCACCTCTGA GCCTCCGCAC CTGCTGTTCC ACAGCACTCT CCGCATTGCC      240
TTCTCCCACT GTGGCTCACT GCTGAGCTGT GTTCAGGCCC TTGGGAAAC CCTCTCTTTC      300
ACTCCTTTTC CTTGGTCTGG CTTGGGAGCC CATGCTTACC CCTGTCAGGA CACCTTGAAA      360
CCCAGCAGTG AAAACATGAC ACTTCCTTGT CTGGCTGATT TTCTTAGTGA AGCGAGTAGG      420
AGTTTCCTTT GTCAGGACTT CAGCAAGCAA AATTCAGGAG AGGTCATAAA ATGTCTCGAG      480

```

(2) INFORMATION FOR SEQ ID NO:376:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:376:

```

GAATTCTAGA CTGCCTCGA GTAACCAGAG AGTCTTGTC ACATTAACAC TAGCAGTATT      60
TCCAACACTT TATTTTTTTA ACTTCCTTTA TTATACAGAA GCAGGATCTA TGTTTTTTAC      120
TCTTTTTGCG TATTTGATGT GTCTTTATGG AAATCATAAA ACTTCAGCCT TCCTTGGAAT      180
TTGTGGCTTC ATGTTTCGGC AAACAAATAT CATCTGGGCT GTCTTCTGTG CAGGAAATGT      240
CATTGCACAA AAGTTAACGG AGGCTTGGA AACTGAGCTC GAG                                     283

```

(2) INFORMATION FOR SEQ ID NO:377:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:377:

GAATTCGGCC	TTCATGGCCT	AAACAGCAAA	GAACAACTCA	TCACCGCTCA	CGTTCAGTAT	60
CTCCTCATCG	CGGCAATGAT	CAGGGAAAGC	CGCGTTCACG	TTTACCAAAT	GTGCCATTAC	120
AGAGGAGTTT	AGATGAAATT	CATCCAACAA	GAAGGTCACG	TTCTCCAACC	AGACACCATG	180
ATGCCTCCCG	AAGTCCAGTT	GATCATAGAA	CCAGAGATGT	GGATAGTCAG	TATTTATCAG	240
AACAAGACAG	TGAGCTTCTT	ATGCTGCCCA	GAGCAAAACG	AGGACGAAGT	GCAGAATGCC	300
TACATACTAC	CAGAATGTCT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:378:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:378:

GAATTCGGCC	TTCATGGCCT	ACTGAAATTT	CAATAAAACC	AGCTTGAAAG	TTCCATTACT	60
AGAAAGATAA	GAGTGGTCAG	AAAACATTTT	TTATTAACTT	ATTTTCATCTA	GTAAGAGTAT	120
CTTAAATGTT	TTTTCTCTTG	AGTACTGAAT	ACACATGCAG	GACAATGGAC	CTAAATACAG	180
TTAACTTTTG	TTTTTCACTC	CTTTGCTTTT	GCATTGTCAA	TAGTCCGGTA	AGGTTTAGGT	240
TCTATCAGAA	GTAATCAGAC	ATGCAGTGGG	CAATCGATAA	TTTCTACCTG	GGCCCTGGAT	300
GCTTGACAA	CTGCAGGGGC	CATGGAGATT	GCTTAAGGGA	ACAGTACTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:379:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:379:

GAATTCGGCC	TTCATGGCCT	AGTCTGTGTG	TAGTGGAAC	TCTATTGCCT	GCCCTGCACA	60
TCTGCTCCTT	TTCTTCTCTG	CACTCTGGGA	CAGCTTCTAA	AGTTTGTCCA	ACATGTCATT	120
GACTGAGTTT	TGTATCATTT	CAGTTCTGCT	CTTTACTGGT	TCCTATGTGG	ATGCTAATTA	180
TGCAAATGCA	TTTTCCACCT	CTTGCACTCC	TTTTTCTAAG	TCACCTCACT	TCTCATTTCC	240
TCATGTTTTT	CCNTTATCCT	CTTCTCTCGA	G			271

(2) INFORMATION FOR SEQ ID NO:380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:380:

```

GAATTCGGCC TTCATGGCCT AACGCGGCCA GCGGATTTCG TGAAGCGATT CCTGCAGGCG      60
TTGGTTCCCC TCTTTGACCT GGTACAAAGA ATTTTACGTG AAAGATTTTG TCGTCAGAGT      120
CCACATAGTA ACCTATTTGG AGTGCAAGTA CAATACAAAC ACTTAAGTGA GCTGCTGAAA      180
AGAACTGCTC TCCATGGAGA GAGTAACTCT GTCCTTATTA TCGGACCCCG AGGATCAGGA      240
AAACTATGT TAATAAATCA TGCTTTGAAA GAACTCATGG AAATAGAAGA AGTGAGTGAA      300
AATGTATTAC AAGTTCACTT AAATGGACTG CTGCAGATCA ATGACAAAAT CGCCCTAAAG      360
GAAGTCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:381:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:381:

```

GCAGAGTTAA GCAAATTAAT TATAGCTATC TTTAAGCTAT AAATGTGTGA ACATGTATAT      60
ATACCATTTA TTATGTTCTA CTTTAGTGAT ATACCTTAAT TTAGTGGGCT TTGGCAGGGC      120
GGGGGAGGGG GAACGTTTCT TAATCTCTGA GGAAACAAA ACCTGTTTTT TACTTGAGTC      180
TAACATATGG TCCCAATTTA TTAATACTTC TGTAAATTT GATGTCAGGT CAACATTTTT      240
CAGAAATGTA TTTATTCTCA GAAACAGAAC ACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:382:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:382:

```

GAATTCGGCC TTCATGGCCT AGTTGTTACT GGAGTTAAAG AGAGAACTGA GAAAGACAAA      60
GGAGTAGAAC GTTTACTCAA ATAAGTAATA ACAGAAACT TTCCAAACCA GAATATACAG      120
GTACAGGAAG GTCAAGGGTC ACCAATCCGA GTTAACTCAG ACAAGAATAC TCCAATTTAC      180
AAACTCATAA GGGTCAAAGA CAAAGAGAGA ATTTAGAAAA CAGCAGGAGA ATAGAAGCAA      240
ATAACATATA AGATAGATCC AATATGCTTG GTAGCAGATT TCTCAGCAGG

```

(2) INFORMATION FOR SEQ ID NO:383:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:383:

```

GAGAGTGTGG AGAGGGTACA TTTCCCTTGT ATNCTATGTT CTTCTTTCTA GTGGGTCTCA      60
TG TAGAGATA GAGATATTTT TTTGTTT TAGAGATTCCAAA GTATATATTT TTAGTGTAAG      120
AAATGTACCC TCTCCACACT CCATGATGTA AATAGAACCA GGAATAAATG TGTCNNTTGTG      180

```


ATAATCCCAT AGCAATTAT GGTAAGAACA AGACCCCTTT CCCTCACCAC CGAGTCTCGA 240
G 241

(2) INFORMATION FOR SEQ ID NO:384:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:384:

GAATTCGGCC TTCATGGCCT AGAAACACAA TAAAGCCCCA CAACAGCAAA CTTTTTAAAC 60
GACGAAAGAG AGCTCTAAAT AACAGCAAAA TGCTGCTCTT CTTGCTCCCA TTATGTTTAC 120
TATTACTGTG CTCTAGTGAG AATAGCAAGG GGTCAAAGGA ATTTATAACA CTTCTATAC 180
CTTCAACTTA CCAAGTCCCC TACCAAGTAA CAGTTTTCTG TCAGAGAGAA AGTTCTGCCC 240
TCCCTGCTCA AAGGTGTCCA TGCCAAC TAGCTACCTG GGTCTCGAG 299

(2) INFORMATION FOR SEQ ID NO:385:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 546 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:385:

GAATTCGGCC TTCATGGCCT AGAAAGAGGT GGCAGAAGGA ATGGTAGGAA GGGGAGGATG 60
TAAGCGATAT CATCAAGTCA GAATCATGAG TTCTTGGTGC CCGGATGTTA GAGGAGGGAA 120
AAGGTGAAGA TGGCTGAAGC TGTACACTTT CATGATGGTG GAATGGAGGG GTCCCTTGGG 180
AATTAGGGGT GTCTCTAGGA AGAACCAGCT TAGGGTACAT TGAGAAAGAG GAGACAGGCT 240
AGGCAGGTCT AGAATTCAAT CGCAGATCAC AGCTACAAGG ACCAGGCCTT TGATACTCTG 300
AGCCTCGATA GCTCTGATAG CATGGAGACC AGCATCTCTG CTTGCTCACC AGACAACATC 360
TCTAGTGCCA GCACTTCAAA TATTGCTAGA ATAGAAGAAA TGGAGAGACT TTTGAAGCAG 420
GCTCATGCAG AAAAGACGCG GCTGCTCGAA TCCAGGGAAC GGGAAATGGA AGCCAAAAAA 480
CGAGCCCTGG AAGAAGAAAA ACGACGCCGG GAAATCCTGG AAAAACGATT ACAGGGATAG 540
CTCGAG 546

(2) INFORMATION FOR SEQ ID NO:386:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:386:

GTTAGGATCA TACATCATAG GTGTATGTTT AACTGTTCAA GAAACTGCCA AACTGTTTCC 60
CAAAGTGTTT GTATTGTTTT ACATTTCAC GAGCAGTGTT TGAGAGCTCC AGTTCTTGCA 120
CATCCTAGCC ACAAAAAGGT TCTGTTTTT AAAGACAATT TTTTTTTCT TTGAGAGTTT 180

```
CGCCCTAGTC GCCCAGGCTG GAGTGCAGTG GTAAGCGAAT CCCTGCTACA GGCCAGAGAC      240
TGTTCTCAGT TGGTTTTTAC ACCAAGTATC GCACTTCATT CTAACACTCC ACCATTTTAC      300
AAATGAGATT TCTCGAG                                         317
```

(2) INFORMATION FOR SEQ ID NO:387:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:387:

```
GAATTCGGCC TTCA*GGCCT AGGTCAGGTT AGTCAGCTAA TCGATAAGAG ACTTGAAATT      60
ACTCTTTTGG GATTAGCAAA TAGAAGGGAA AAACATGATA AGGGCACAGA GCGGTGGGTC      120
TGGGGGAAAA AGCAGAGGCA CAGTTTGAAA AAAATGTGTA AGAGACTGAC TAGGTAAGAT      180
ATGGTCACAG TTCATAAGTC CTTGAATTC TAGGATTAAA AAGGTGAACT CGAG             234
```

(2) INFORMATION FOR SEQ ID NO:388:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:388:

```
GAATTCGGCC TTCATGGCCT ACTAGATAAG TGTCAATTCC ATCTGCTTCT GATTCCCCAC      60
GTCAC TGCCC TGGTCCACAC ACTGTGATCT TCTGCCCCCA TCTGAGTGCC GCATACTCAG      120
CCTTGTCCCT GCATCAGACC CCGGCCCAGC ACAGTAACGA GAATGGGCTT CCTAAACACA      180
AATCTGATTT GTTCCGCCTT CCACTTCCTA GTGGCTTCAT TCTCGTGCCC TCACTCAGGG      240
CCCTCACACA TGCTGTCCC TGCACCTCCG ACACCCTTCC CAGCGCCCT CGAG             294
```

(2) INFORMATION FOR SEQ ID NO:389:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:389:

```
GAATTCGGCC TTCATGGCCT AAGCAAAGCT AAGTGTAATA CTAAAAAGCA GTTTGTTGCA      60
ACTGGTCATA AAAGTGATTA AATCTAAAGC TGGCATTAAAT AAGGAAGCAA GGTAATAAAA      120
CAAAAATATA AACAGCTTTG AGAAAGTACA CCTAATAACA AAATCTTGTA ACACAACAAA      180
TGAAATCAC AAAAAATATA AGGAGACTCC TCGAG                                         215
```

(2) INFORMATION FOR SEQ ID NO:390:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:390:

```
GAATTCGGCC TTCATGGCCT AGAAAAACAC TATAGTCACG CAAGTAATGA CCCTTCTTAT      60
CCTCAACCCC CAGCATATAT GCACAAGGAC AAACAGTATA CATACAATCT CACCTGAGAG      120
ACGTCCTCAG ACTTGTGTTG AAACCTTATC ATGCTGCATT ATCTCCCTTA CAACATCCTT      180
CCTGCCTTGT TTCTCATTTT CACACTATAC GGAGTAAAAA AATATACAAT TTCTATATAT      240
TATATATATA ACCTCCATAT ATTTTATACT ATTCATATT TTTATACTAT CAGATTAATG      300
TTTTATATTT TATCTATCAT TTTAAATATG CTATGTAAAG CATCTACAAA ATTGGTCACC      360
ATTCCTATGG GAAGTATCTG CAGAACTCTA GAAATGAATT CATCTTTTGC TTACCCCTCC      420
CTTTTGTAGG GGACAGGGAC TTTCTTCTTT TCCCTCATCT TCATCTTCCC CCTCGAG      477
```

(2) INFORMATION FOR SEQ ID NO:391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:391:

```
GAATTCGGCC TTCATGGCCT AGTTAGTCAG AGTGAAATAT TCAATAATGA GTGGTGACAG      60
CTTGGGACTT GAGATTGTTT TTGTCTTTTT TCTGGCATT TTTCTGCTTC ATCGATATGG      120
AGACTTTAAG AAACAGCATA GACTTGTGAT TATTGGAACA CTGCTTGCTT GGTATCTCTG      180
CTTTCTTATT GTCTTCATAC TGCCTCTGGA TGTTAGTACG ACAATATACA ACCGGTGCAA      240
GCTCGAG                                         247
```

(2) INFORMATION FOR SEQ ID NO:392:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:392:

```
GAATTCGGCC AAAGAGGCCT AGTCATCTGC ATTTATTATG AGCAGCAGGT GGGACACTTC      60
CAGCAACAGT AAAAAAAGT AATTTACAAA AGCAGGTTTC AGTGAAGCCA TCTGGTTGTT      120
ACCCTTGGGT GCTCACACGT AGATGCCAAC CCAGAGCAGC AGGAAGAGGA CTCCAAAGCC      180
CATGAAGAGT GAGGCCACTA AGGAGATGAG GAGCTCTTTA TAGATATCAC GAGTGTACTT      240
GGTAGAGGTG ACCTCGTAAA CGAAGAACCA GGCGGTGAAG AACATGCCAA TGGCCAAAAG      300
CACCACGGTC AGATGGGGGA AGACAGCTGG GTTCACTGGG CTGGTATATC TGCTCATGGC      360
CTCGAG                                         366
```

(2) INFORMATION FOR SEQ ID NO:393:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 205 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:393:

GAATTCGGCC AAAGAGGCCT ACCCTGGGTT AACATTCAAG ATGGTACATG CTGAAGCCTT	60
TTCTCGTCCT TTGAGTCGGA ATGAAGTTGT TGGTTTAAAT TTCCGTTTGA CAATATTTGG	120
TGCAGTGACA TACTTTACTA TCAAATGGAT GGTAGATGCA ATTGATCCAA CCAGAAAGCA	180
AAAAGTAGAA GCTCAAAAAC TCGAG	205

(2) INFORMATION FOR SEQ ID NO:394:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 387 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:394:

GAATTCTAGA CCTGCCTCGA GCCGGAGATG GANAAGAAAG TCAGCCTACT CAAGGACAAT	60
AGCTCTCTGG AATTGACTC TGAGATGGTG GAGATGGCTC AGAAGTTGGG AGCTGCTCTC	120
CAGGTTGGGG AGGCACTGGT CTGGACCAAA CCAGTTAAAG ATCCCAAATC AAAGCACCAG	180
ACCACTTCAA CCAGCAAACC TGCCAGTTTC CAGCAGCCTC TGGGCTCTAA TCAAGCTCTA	240
GGACAGGCAA TGTCTTCAGC AGCTGCATAC AGGACGCTCC CCTCAGGTGC TGGAGGAACA	300
TCCCAGTTCA CAAAGCCCCC ATCTCTTCCT CTGGAGCCAG AGCCTGCGGT GGAATCAAGT	360
CCAAGTGAAC CATCAGAACT TCTCGAG	387

(2) INFORMATION FOR SEQ ID NO:395:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 553 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:395:

GAATTCGGCC AAAGAGGCCT ATCGAGAAGC CTTGTTTATT TAATGTGAGT TTGTGCCTTT	60
TTGTCTCAAT CTTCCAATAC AGGTATATTG AGAAAAAAG CAGTCTAATA AAATCCTAGA	120
CAGAACTTTC TGGAGTCCAG TTTGGTGATG TCCATTTTCC AGCTGTATGT ATCCTCAAAC	180
TTGCACTGAT AACCGCCATT TTACCAGGGC AGGATTAGGA AGAGGTACAA AGGTGTGTCT	240
GAAAAATTTT GCACGTGGAT TTCTGCATAT AATAGTCCCG TGTCAGTTTA CTTATGCAAA	300
CATTGCACAT CTGAATTGTA ATTCGGCCGT TTCCTACTGA CAGGATGTCC TTTTGCTTTT	360
GTCTGCCTCC TCTTCACATC TTCCTCTTTA TCCACCCTGC AGCCGGGGGG CGGGGGAGAC	420
CGGATCCCGG GCAGGACAGT GGCTAGGCTG CGTGTCCCCA CCCCCGACCC TCGTTTGACC	480
CCTGGGAGCC GGGGCGAAGA CAGCACAAGG ACGGAGCCCT CGGATCCCTC ACGAGTGGGG	540
CAGAGGCTGC GGG	553

(2) INFORMATION FOR SEQ ID NO:396:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:396:

```

GAATTCGGCC AAAGAGGCCT ACAAGGTTAC TTGACCAAGA TGGTGACATT GTAAGATTG      60
AACAAAGGAA ATGTGACTTC AGAGTCATGG TTGTTAACTA TGCTATGAAG TAGGAAAAC      120
TTATGAGGTC TTTTAACTC AAACAGTCGA GTTTAAGTT GAGGGTTAGC AATGATGAAT      180
GAGTGGCCAA AAAATGTATT CATATTTTTA GTCTTTCTTA GAATTACTGG TAGTTGTGCA      240
CAACTAGAGG GTATTTATTT GTGTGTGTAT GTGTCGTGTG TGTACGAGTG CTGGAAATAC      300
TCTGCCAGTT TACAGTAGAG GCAGGCTTAC ATAATTCAGT CATGAAAGCT GAGGCTTATA      360
GTTTAGAGGG GATCGTCCTC TTCTTAATGA GTCTGTAAGT TACAAAAATA ACTTTTTTCT      420
TTATTTACTA ACTGGTTGGT TTTTAATATT AAAATATTAG GTGCTTCTCG AG           472

```

(2) INFORMATION FOR SEQ ID NO:397:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:397:

```

GAATTCGGCC AAAGAGGCCT AGATTGGGGG ACATTCTTCT TTAGAAGGAA AAGAGTCTAA      60
TTAGTGGATA TTAAGTAATT AAATAATACA TACTATCAAA TATTATGAGA GTCACATGAA      120
CCATGAAGTC TTCACTTAAT TTAGGAGAAA TGGGGAATAT TTTCTATCAT TCCTGATAAC      180
AGAACTAGAT ATTTCAAGAT CATAGTCATG GAATGTAATC CATAATACCA AACAGGGTGC      240
TTTACTTTGA AGCCATTGAC CATTAAATTT GATTGTTAGT AGCACAGGCT ACCAAAAAAT      300
AGCAAGGAAT ATGGTATCCA CACAGATCTC GGCTGGCCTC AAGTAATCAA AAGTGAGAAT      360
GAAACATACA TGACACAAC TGGGACCTCT GGGTTTCTGA GACGTGGGCT ACAAGATTAT      420
ATTAGGTAGA AAACATAAGG AAATGTATTC CAAGCAAAAG TGGCAAGGGA ATTTACAGAG      480
ACTAATTTTT TAAGGGAGGT AATAAAAGCA GCAGTTAAAA TGCATGTCCA TGTATCAGAT      540
TCCTGGAG                                     548

```

(2) INFORMATION FOR SEQ ID NO:398:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:398:

```

GAATTCGGCC AAAGAGGCCT AGGCTAAATA CCGGCACGAG ACCGATTTTC TGAAGACAGC      60
AGATTTATCA CTGTTAATCC AGCGGAAAAA AACACCTCTG GAATGATAAG CCGCCCTGCT      120
CCAGGGAGGA TGGAGTGGAT CATCCCTCTG ATTGTGGTAT CAGCCTTGAC CTTCTGTGTC      180
CTCATCCACT TCTCAAATC GGAGAACTGC AAGGAGCTGC AGCTGGAGAA GCACAAGGGC      240
GAGATCCTGG GCGTGGTGGT GGTGGAGTCG GGCTGGGGCT CCATCCTGCC CACGGTGATC      300

```

```

CTGGCCAACA TGATGAATGG CGGCCCGGCT GCCCGCTCGG GGAAGCTGAG CATCGGGGAC      360
CAGATCATGT CCATCAATGG CACCAGCCTG GTGGGGCTGC CCCTCGCCAC CTGCCAAGGC      420
ATCATCAAGG GCCTGAAGAA CCAGACACAG GTAAAGCTCG AG                          462

```

(2) INFORMATION FOR SEQ ID NO:399:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:399:

```

GAATTCGGCC AAAGAGGCCT AGGCCGGGCA CACAGAAAAA TGCAGGAAT AGAAATGCTT      60
GCATACTCTT GATTTTTTTT TTTTTTTTGT GTGTAAAAAA CACACCCTCC CCTCCCACCC      120
CAAAAAACAT CAAATTCCTT CCTTTTCCCC AAATCCCTGG ATCTTGGAAT GAAAGCCACC      180
CTTCCCCAAT CTGTCCTCAC CTCCTTCAGC CCATCCAAGT TATGCACAAA AAAACAAAAA      240
TTAGTGAGAA ATTTGGGGAT TTGCACAACA AAAAATTAGA TAATGTTTTC CAAAACTAGG      300
TCTTCTATGC TGTGTCAAAA AAAGTTTCCT ACAGACTGAG GATATTCACA CGACAGGAGC      360
CTGGGGGTTA AATGAGCCTT TATTAGAATG TTGTAGCAGT TGTGTTTGAA GGCGGTGGCC      420
CTACAAAA

```

(2) INFORMATION FOR SEQ ID NO:400:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:400:

```

GAATTCGGCC TTCATGGCCT AAGTTGAAAC TTACGAGTAA CATACTGGT GTCTGATTGG      60
TTGTCATACT TTTCAATTTT CCTCCTTTCA GATCCAATCC ATTCTACACA TTATACTGAT      120
TTTTTCCTAG TGTACTGATT TCTGTTATGT CACTTTGCTG CTTAGGCTTC TTAATGCTTA      180
CTGTATCAGG TGTAACACCC TTTTGCTTAC CTTTCAGGC CTTTTAGAG TCTTATATAG      240
CTTACTCCCA TGCTCCAACCT CCCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 236 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:401:

```

GAATTCGGCC TTCATGGCCT AGGCACTTTG AAGAGATATA GAACTCCGTG TATCACATTT      60
TCCATTTTTA TTTCAATTTT TAATTGCCCC GAGCCTAATT TCTGTGGGCC TCTGCTGATT      120
TGCACATTTG AGATTCGTGT GTAAATATGC GTGTGGCATG TGTACACGCC TGGGCCTCCT      180
TATCACAAAG TGTGCTCTCT CAGTGTTTAA ATACACACAA TCCACATCGA CTCGAG          236

```

(2) INFORMATION FOR SEQ ID NO:402:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:402:

```

GAATTACCTT ATACACATAG CCTGAAGGTA ATTTTATACA ATATTTCCTA TAGTTTGTG      60
CTTCAAACAA AGTTTGGGTA CATTGAACCA TCAGAAAGGA AAGGTGTCAT TGTCTCAGCC      120
ACCCATGTGG ACAATCTCTG GTTGTTTGGC ATCACTGTTG TTGCTGAGTC TGAATGTGAG      180
GAACATGCCA TTGGCATGTC TTGCCACAC ACACACCATT TTGTTATCTT TTGTGGGTGT      240
GCTTATGTGG GGAATCTGG GCGTGTGTGA AAAAAATATA TTGCAGCTCG AG              292

```

(2) INFORMATION FOR SEQ ID NO:403:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:403:

```

GAATTCGGCC TTCATGGCCT ACTTGGGGTA CTGAGATACA TGGGGCCGAA AAGGGGTAAT      60
ATGGCCATCT TTTATCAGAA AAAGTGACAA AACGGGAATT TAAAAAATGA ATTTTCCATC      120
TGACTTTATT TCCAAATACA CTTTCTTTT TAAAAAACCA ATACACTTTC TTGAGGATG      180
ACAGTATTAG GAAATCCAAT TATACAAAAA ATACTACATC TAGTCTGGGG TAGATATATT      240
TATTTTGGT AACATACATT AAGTGGCACT AATTACACAG TAACTATAAG GTAACAAACA      300
TGAAACCACA GAACTGTAAC TCTGCCACAG CTGCATGAAC TCGAG              345

```

(2) INFORMATION FOR SEQ ID NO:404:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:404:

```

GAATTCGGCC TTCATGGCCT AAAAAAAAAA AAGCCATTAA TCTAATTAAT TGTTTAATCC      60
TGCTTACAAG ATTATCTTGA AAAAATGTGC TGGGGAGTAT GGTATAATGA ATTACGGGTC      120
CAAGAATTTG GGTTCAGATA CCACCTTCAG TCTTTACTAA GCTGCGTGAC TTTAGCAAAG      180
TGCTTAGTCT CTCTAAGCTT CGGTTTCCTA ATCTATGAGG AGGGCCTAAG ATATCACCAC      240
CCATCACTCG AG              252

```

(2) INFORMATION FOR SEQ ID NO:405:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:405:

```
GAATTCGGCC TTCATGGCCT AAGAATACGA AATTGAGAG GATGAATTG ACCTTTAATA    60
TTGTTGGACT TTGTATTGGA TATCTTTCCT CCATCACTTC AAAATCGTCT TGCTTGGCCT    120
CTTATTGCAA CCACAGCTGC AGTAGACAGT TCCATACAAG CTTCCAAGAA CTTTCATGGGT    180
ACATCTGGAG AGCACCTCAC CTGGGGCCAC ATTCTCTACC TTCCTGTCT TACTCTTCCT    240
CCTCTGGGCT TCTTCTGGT GCATGGGGGT GGGGGGAGAT ATTAAGTATT CCCCACAGC    300
TCGAG                                                                    305
```

(2) INFORMATION FOR SEQ ID NO:406:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 250 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:406:

```
GAATTCGGCC TTCATGGCCT ACACAGCAAC AACCAACATA GCTAATACAG AAAGCAGTCA    60
GCAGACTCTA CAGAATCCC AGTTTCTTTT AACAAAGGTTG AATGATCCTA AAATGTCTGA    120
AACGGAGCGC CAGTCCATGG AAAGCGAGCG TGACAGCCGC AGCCTGTTTG TCCAAGAGCT    180
CCTTCTGTCC ACTTTAGTGC GTGAAGAGAG CTCATCCTCA GATGAGGATG ATCGGGGGGA    240
GGTTCTCGAG                                                                250
```

(2) INFORMATION FOR SEQ ID NO:407:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 481 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:407:

```
GAATTCGGCC TTCATGGCCT AAAAGAACT AGGTGTGATT GGAAGGAAGA ATCATGAAAG    60
ATCAGGGTAG ATACTGGTGG GGCAGCTATT AAAGGAGTTT GAGCAGGGGC ATGACATCTT    120
CACATTGAAA GCAATATGGG AGTCGAATTA AATTAGTAC CCAGTTGAGA TAAAGTCCA    180
TTGCCATATT CACAGTGAGG TGGGACAAAA GCAGAGTCAG AGAGATTAAG AGGCTGGGAA    240
AGATTGAAGT GATTTTtagg AATCAGAATC CACATCAGTT GATGACAAGT ACAGAAGGGC    300
ACAATAGCAA GAAGAAGAAG TAAATGATAA TTCCTAGATG CCATTAGTCA CAATCAAGTA    360
CGGAAGAGAC ATTATTGACT GAGGTTGAAT CAGGGCAGAG AAGATAATAT ACCTGATTTT    420
GGAAGTGTTG CATGTAAGGG GGCTTCGATT TCAGCTACTT ACATACTTGG GAAGTCTCGA    480
G                                                                    481
```

(2) INFORMATION FOR SEQ ID NO:408:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 308 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:408:

```
GAATTCGGCT TCATGGCCTA CCCGGCAATT GGCTGATCCG CAGAAACATT TCTGGGCTTC      60
TTTTCCATAT CTCTGGAAGT GATAGTCAAA CGTTAACTCT GAGCCTGAAG GAACCAAGTTT      120
GGTGGTAAAA AACCCAACCC TCAGTTGTCC GTTCACAGTC CATTTTGGG TTTACAATT      180
TGGTTCACAG CTGTGATTCA TGAAACGAGA GCAATTCCT TTTGAGTGG CATCTATTAT      240
CTCATCATTC TTCAGGGCCA TGAAATAGTA ATGGATGTTT TTGTTTCGTG CATACTCCTT      300
CACTCGAG                                         308
```

(2) INFORMATION FOR SEQ ID NO:409:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 337 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:409:

```
GAATTCGGCC TTCATGGCCT ACAATGAGGA TAATACAAAA GAGCAATCTG CCCCACTGTG      60
AGCCTGAGCT TCCCACTAGT ACTTCTCTCT CTCCAGAGGG ATCCACTCCT ACCAGTCTGG      120
AAAGCACTGG GCATACAAGC GCACAAATGC GTGGCACATA CTACAAATCC TTCTAAAGCC      180
ACTGCTGTAC ACCTGCCTCA CTTAACCATG CAGCCTCAAG GCTGTCTCAT GTCATTCTTT      240
CCTACAGCTG CAGAGTTTTT AACATATGGA CAGGTGTGCC AGGATTTATT TGACTAGTCT      300
CTTACTGATC TAGCTCACCT CCTAAATACA ACTCGAG                                         337
```

(2) INFORMATION FOR SEQ ID NO:410:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 315 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:410:

```
GAATTCGGCC TTCATGGCCT AAAATGTGGG GATTGGGAAC CACTAGTTCT TTCAGATGGT      60
ATTCTTCAGA CTATAGAAGG AGCTTCCAGT TGAATTCACC AGTGGACAAA ATGAGGAAAA      120
CAGGTGAACA AGCTTTTCT GTATTACAT ACAAAGTCAG ATCAGTTATG GGACAAATAGT      180
ATTGAATAGA TTTAGCTTT ATGCTGGAGT AACTGGCATG TGAGCAAACGT GTGTTGGCGT      240
GGGGGTGGAG GGGTGAGGTG GGCCTAAGC CTTTTTTTAA GATTTTTCAG GTACCCCTCA      300
CTAAAGGCAC TCGAG                                         315
```

(2) INFORMATION FOR SEQ ID NO:411:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 277 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:411:

```
GAATTCGGCC TTCATGGCCT ACCTGAACCC CTTACTTCGA AGGATCATAA GATTCACAGG      60
GGTGTTTGCA TTTGGACTTT TTGCTACTGA CATTITTGTA AACGCCGGAC AAGTGGTCAC      120
TGGGCACTTA ACGCCATACT TCCTGACTGT GTGCAAGCCA AACTACACCA GTGCAGACTG      180
CCAAGCGCAC CACCAGTTTA TAAACAATGG GAACATTGT ACTGGGGACC TGGAAGTGAT      240
AGAAAAGGCT CGGAGATCCT TTCCCTCCAA ACTCGAG                                277
```

(2) INFORMATION FOR SEQ ID NO:412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:412:

```
GAATTCGGCC TCATGGCCTA GTGGTAGGGC TGAATTCGCA CTATAGGGTT AGATTTTCTA      60
CTGTAGGGTT AGATTTTCTT AATGGTGTGT ATATAATAAT ATAATATTAA TAATAATCGG      120
AGAGGGTCAA AGAGGAGGGA AACTGGGTAA CCCAAAAACA TAAGGTCGAG GTCCCTGTTC      180
TTCACCGGAA AGAGGGTCAA GGACCAAAGC CATAGATTTG ACTGGTAGTT TAGTTTAGTC      240
CTGTCTACGA AGAAGAAGAG CGGTTGTTTG TTTTAACAGA TTCAAGAGCA GGAAGCACTC      300
ATTTAGATAA CTCGAG                                316
```

(2) INFORMATION FOR SEQ ID NO:413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:413:

```
GAATTCTAGA CCTGCCTCGA GTCAGGCTTT TAAAAACAAT CTCATCTGTC CCTCTAAAAA      60
TTAGCTTCCT TTAGAACCTC TTCTCCTTGG CAATATATTA GTGATACTAT TGTATCTTC      120
ACACTAAAGA TTCAAACTT TAGTTTTTGT TTTAGGAAAG TTTTATTATT TTACATTCTC      180
TTCATCCTTC ATAATTACCC AGTCATCATG AACTTTGTAG TTATCTATTT CTTCATAGGA      240
ATCCTCGAG                                249
```

(2) INFORMATION FOR SEQ ID NO:414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:414:

GAATTGATAC TAGGGACCGA AGGGAACATA GAGACTCCAG AGACATGCGG GACTCAAGGG	60
AGATGAGAGA TTATAGCAGA GATACCAAAG AGAGCCGTGA TCCCAGAGAT TCTCGGTCCA	120
CTCGTGATGC CCATGACTAC AGGGACCGTG AAGGTCGAGA TACTCATCGA AAGGAGGATA	180
CATATCCAGA AGAATCCCGG AGTTATGGCC GAAACCATTT GAGAGAAGAA AGTTCTCGTA	240
CGGAAATAAG GAATGAGTCC AGAAATGAGT CTCGAAAGTA AATTAGAAAT GACCGAATGG	300
GCCGAAGTAG GGGGAGGGTT CCTGAGTTAC CTGAAAAGGG TAGGCTCGAG	350

(2) INFORMATION FOR SEQ ID NO:415:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:415:

GAATTCGGCC TTCATGGCGT TAAAACTGTG CCTAACAGAG GTGTCCTCTG ACTTTTCTTC	60
TGCAAGCTCC ATGTTTTTAC ATCTTCCCTT TGAATGTGTC CTGCTGCTGC TGCTGCTACT	120
ACTTACAAGG TCCTCAGAAG TGAATACAG AGCGGAGGTC GGTGAGAATG CCTATCTGCC	180
CTGCTTCTAC ACCCCAGCCG CCCAGGGAA CCTCGTGCCC GTCTGCTGGG GCAAAGGAGC	240
CTGTCCTGTG TTTGAATGTG GCAACGTGGT GCTCAGGACT GATGAAAGGG ATGTGAATTA	300
TTGGACATCC AGATACTGGC TAAATGGGGA TTTCCGCAAA GGAGATGTGT CCCTGACCAT	360
AGAGAATGTG ACTCTAGCAG ACAGTGGGAT CTACTGCTGC CGGATCCAAA TCCCAGGCAT	420
AATGAATGAT GAAAAATTTA ACCTGAAGTT GGTCATCAAA CCAGCCAAGG TCACCCCTGC	480
ACCGACTCTG CAGAGAGACT TCACTGCAGC CTTTCCAAGG ATGCTCGAG	529

(2) INFORMATION FOR SEQ ID NO:416:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:416:

GAATTCGGCC TTCATGGCCT ACTGAGCCTA GTAATTCAAG GCTGCAGTGA GCTGCGATCA	60
CATCACTGCA TTCCCGCCTG GGCAACAGAA GTAGACTCCA TCTCTAAAAA GAAGGAAAGA	120
AAAAAAGGAA GAAATATACA GTAATTTTAA ACTGGGAGAT GAAATGCTAA TTTCTAGAAG	180
TCCATTTGGT TTTGAAGGGT CTCATGTCAA AAAAAAAAAA AAGTAAGTAA AATAAGACCC	240
ATCCTACTGT TTTATATACT AAAATAGTAA GTTAATTAAA TGAAATGAA GTACATTTGG	300
GCTTTCATTT ACCAATCCTG GAATGTTGAA AAGTTGCCCA AAAGACATTT AGCAAGACTC	360
GAG	363

(2) INFORMATION FOR SEQ ID NO:417:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:417:

GAATTCGGCC TTCATGGCCT ACCTGAAAGC CCATCTCCTC CAACTTGCAG CGCCGGTAGA	60
GCTCGTAGTG CCGGCTGTGG GTCTGCTCGC GGAGGTCTTC CATGTTCAAC CGGATCAACC	120
TGCCTCGAG	129

(2) INFORMATION FOR SEQ ID NO:418:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:418:

GAATTCGGCC TTCATGGCCT AGGAGGTGGG TATAGGGAAC ACTTGGGGAG AAATAGTGAA	60
ATCTGAATAT AGACTGTGCA TTGTATCATT TAGTATAAAT GTTGACTTGC CTGATTTTGT	120
TGTTGAAGGC ACTGTGGTTA CACAAGAGAA CGTCTGTCTT CCTAAGTGAT GCATGCCAAG	180
GTTTGAGGG GCATCTCTGC TGCAATTACT CTCAAATAGA TCAAAATAAT AATAACGTGT	240
GTGTGCATGA TGGAGACAGG GAAGAAGAAA GGAAAGGGCT CGAG	284

(2) INFORMATION FOR SEQ ID NO:419:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:419:

GCCAGCACAT TGTGGAACAG AAAAATGGCA AAGAAAGAGT GCCCATCCTC TGGCATTTC	60
TGCAGAAGGA AGCAGAGCTG AGGCTGGTAA AGTTCCTGCC TGAGATTTTG GCCTTGCAAA	120
GGGATCTAGT GAAGCAGTTC CAGAAGCTCC AGCAAGTTGA ATACAGCTCC ATCAGAGGCT	180
TCCTCAGCAA GCACAGCTCA GATGGGTTGA GGAGCTGCT TCACAACAGG ATCACAGTCT	240
TTCTGTCCAC ATGGAACAAA CTGAGGAGAT CGCTTGAGAC GAACAGCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:420:

GGAACCAACA GAACAACCTG TGAGGAAGAA CAAAATGGCC TCTAATATCT TTGGGACACC	60
TGAAGAAAAT CAAGCTTCTT GGGCCAAGTC AGCAGGTGCC AAGTCTAGTG GTGGCAGGGA	120

AGACTTGGAG TCATCTGGAC TGCAGAGAAG GAACTCCTCT GAAGCAAGCT CCGGAGACTT	180
CTTAGATCTG AAGGGAGAAG GTGATATTCA TGAAAATGTG GACACAGACT TGCCAGGCAG	240
CCTGGGGCAG AGTGAAGAGA AGCCCCGTGCC TGCTGCGCCT GTGCCCAGCC CGGTGGCGCT	300
CGAG	304

(2) INFORMATION FOR SEQ ID NO:421:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:421:

TAATTTAGAT TATACAGAAC TTGGCCTGCA GAACTGAAG GAGTCTGGAA AGCAGCACGG	60
CTTTCCTCT TTCTCTGATT ATTATTATAA GTGGTCCTCG GCGGATTCCT GTAACATGAG	120
TGGATTGATT ACCATCGTGG TACTCCTTGG GATCGCCTTT GTAGTCTATA AGCTGTTCTCT	180
GAGTGACGGG CAGTATTCTC CTCCACCGTA CTCTGAGTAT CCTCCATTTT CCCACCGTTA	240
CCAGAGACAA CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:422:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:422:

GCGATTGAAA TGGATCCTCC AGCTCTTCCA CCAAAGCCAC CTAAGCCAAT GACTTCAGCA	60
GTTCCAAATG GAATGAAGGA CAGTTCTGTT TCTCTTCAGG ATGCAGAAAT GTACTGGGGG	120
GATATTTCAA GGGAGGAGGT AATGACAAA TTGCGGGATA TGCCAGATGG GACCTTCTTG	180
GTCCGAGATG CCTCAACAAA AATGCAGAGA CTCGAG	216

(2) INFORMATION FOR SEQ ID NO:423:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:423:

GAATTCGGCC TTCATGGCCT AAAATTAATG AGTTGAACCT GTGACCACTG CATTCAAGAA	60
GAGTCACCCA AGAGAGAGGT GGGGAGTCGA ACAGAGCTCC TTTACTTTCT CCCACAGAGG	120
AAAAGGTGGA ATTCTGGGCT GGCTTCCCT CACCAGAGGG TATCCCAAAT CTATGACAAA	180
AGAAAAATGC CAGTCTCTTT TGGAAAGTAG GGAATGCCCT AGTGATGCTG TATGAAGAAG	240
CAAGCCTCCA TCTTCCCCGG GGAAATTGA AACCAAGATG GGGTCCTGTC AATGACCCTC	300
TAGCATTAT TGAGTGCCTA TTAGACAGGT GGCCTTGGGC TTTGAAATGC AATATCTTAT	360
TTAACTTAAT TCTGAGAACG TATCTCGAG	389

(2) INFORMATION FOR SEQ ID NO:424:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:424:

```

GCCCCGTGCTG ATGTCTTTGA AAGAAGGCTA TAAGAAGTCC TCAAAAATGG TATTTAAGGC      60
TCCCATCAAA GAAAGAAGA GTGTTGTGGT CAACGGAATA GATTATTAG AAAATGTCCC      120
ACCCAGGACA GAGAATGAGC TCCTTCGAAT GTTCTTCCGG CAGCAGGATG AGATTGACG      180
GTTGAAAGAG GAGCTGGCCC AGAAGGACAT CCGCATTCCG CAGCTCCAGC TGGAACTGAA      240
AAACTTGCGC AACAGCCCCA AGAACTGTGA GCTCCCCAGC TGGGCTGTTT TCTAAGCCGA      300
TCTCTCCGTC GTTCTACTC ATCCCTTAAC TTCTCCCTTA CCAGTGACCC CAGAGACAGA      360
GCCAGGACAG GAGTGGGGGC CAGCTGAGG ACCCCGCCT ACCACCTCGA G      411

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(2) INFORMATION FOR SEQ ID NO:425:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 691 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:425:

```

GGTACCAACA GGACACCCCG GTGGCCCCC GCTTTGACGT CAATGCCCGG GACCTCTACA      60
TTCCAGCAAT GGCTTTCATC ACCTACGTTT TGGTGGCTGG TCTTGCGCTG GGGACCCAGG      120
ATAGGTTCTC CCCAGACCTC CTGGGGCTGC AAGCGAGCTC AGCCCTGGCC TGGCTGACCC      180
TGGAGGTGCT GGCCATCCTG CTCAGCCTCT ATCTGGTCAC TGTCAACACC GACCTCACCA      240
CCATCGACCT GGTGGCCTTC TTGGGCTACA AATATGTCGG GATGATTGGC GGGGTCCTCA      300
TGGGCCTGCT CTTGCGGAAG ATTGGCTACT ACCTGGTGCT GGGCTGGTGC TGCCTGGCCA      360
TCTTTGTGTT CATGATCCGG ACGCTGCGGC TGAAGATCTT GGCAGACGCA GCAGCTGAGG      420
GGGTCCCGGT GCGTGGGGCC CGGAACCAGC TGCGCATGTA CCTGACCATG GCGGTGGCGG      480
CGGCGCAGCC TATGCTCATG TACTGGCTCA CCTTCCACCT GGTGCGGTGA GCGCGCCCGC      540
TGAACCTCCC GCTGCTGCTG CTGCTGCTGG GGGCCACTGT GGCCGCCGAA CTNATCTCCT      600
GCCTGCAGGC CCCAAGGTCC ACCCTGTCTG GCCACAGGCA CCGCCTCCAT CCCATGTCCC      660
GCCCAGCCCC GCCCCAACC CAAGGCTCGA G      691

```

(2) INFORMATION FOR SEQ ID NO:426:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:426:

```

GCAGACCATA TATCGAAAGT TCTTTACTTG TATCAAGGTG AGAAAAAATT AGAAGAGATA      60
TTACCTCTGG GACCAAACAA AGCTCTTTTT TATAAAGGAA TGGCATCATA TCTTTTACCA      120

```

GGACAAAAAT CTCCATGGTT TTTCCAAAAA CCCAAAGGTG TAATAACTTT GGACAAACAA	180
GTAATATCCA CGAGTTCAGA CGCCGAATCC AGGGAAGAAG TTCCCATGTG TTCAGATGCT	240
GAATCCAGGC AAGAAGTTCC CATGTGTACA GGCCCTGAAT CCAGGCGAGA AGTTCCCGTG	300
TATACAGATT CTGAACTCGA G	321

(2) INFORMATION FOR SEQ ID NO:427:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:427:

GAATTCGGCC TTCATGGCCT ATATACTATC AAATGAAAAT AGCAAGATGC TACCATTTAT	60
ATTAAAAAGA GGACAAAATA TTAATATATT CATGGTTGCT TGTCTATGTG GAATATTTCT	120
GGATATATAC ATAAGAAGTT ACATTGGTTA CCTATGGGCA GGTTACTACT GGGTGGCAGG	180
TGGGCTCGAG	190

(2) INFORMATION FOR SEQ ID NO:428:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 670 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:428:

GAATTCGGCC TTCATGGCCT AGGCAAAGCT GGCCCTGACG CCTGGGTTTC TTGGCCCCAG	60
CTGCCCAGCA GGTGCCTCGA TTCCCTGCCC TTGTGACCTC CCAGGAAACA GAACATGATCT	120
GGGACACTAT GTCACCTCTC CTCTCATCTG GGGTCAGTCA GGGTTCGGGG GCTGCAGCAG	180
CCAAGCGCAT GAGAGGTGTT TCCTTGGCCT TCCAGAAGGC CCACTGTGGA GCCAGCCTCC	240
CTATGGGAGG CAGAGCGGCA AGGACAGGGC TTTGGAATCA GCCAGGTCGG CTCCTGGGCT	300
GTGGCCGTGG AGAAACACTG CCCCAGGAT GACACAGGCA AGAGCCCCTG AGGCATGGGA	360
GGCCCAGGGA AGACCATGGG CTGTAGGGGA GAGTGTGGCA GGTGACCAA AGGCCCAAAG	420
AGGGCCGTGG GGCCTGAGGA GGTCAATATC TCTTCTGAGT GGGGGCAGGT CGATTCTTGC	480
ACAAGGTGGG CTCTTCACTG AGCCATAAGG GACAGGGAGG TATGGGAGAG CGCTGGGGGC	540
CCATCCCCCT GTCCACCCAG TGTCCACTGG CCTGTCCTTC AGGGAGCAGA GCAGAGCAGG	600
TGGTGGACGG GCCCAGTGCT GGGTGTTTTC ACCACCATCC CCCCATCCCC CATCTAAGTC	660
GCTCCTCGAG	670

(2) INFORMATION FOR SEQ ID NO:429:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:429:

```

GTAAGGATTG GCGATTCCTA CAGCGAATGA TCACCGCTCC CTGCATCCTC TTCCTGTTTT    60
ATGGCTGGCC TGGTTTGTTC CTGGAGTCCG CACGGTGGCT GATAGTGAAG CGGCAGATTG    120
AGGAGGCTCA GTCTGTGCTG AGGATCCTGG CTGAGCGAAA CCGGCCCCAT GGGCAGATGC    180
TGGGGGAGGA GGCCCAGGAG GCCCTGCAGG ACCTGGAGAA TACCTGCCCT CTCCTGCAA    240
CATCCTCCTT TTCCTTGCT TCCCTCCCCA ACCTCGAG                                278

```

(2) INFORMATION FOR SEQ ID NO:430:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:430:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCTGTTTCATC TTAAATGCT    60
GTTTTCTCTG TTCAAAATGC CCTTTCCTAC CTTATCTACT TGTGCCACTG CATATTCCTA    120
AGGCTCAACT CAGGGTATCT TCCCTCGGAA ACCTTGCTCTG ATCATCCTGG CCCCTCTGGC    180
GGACAGTAAT TTCTGCCTCT GTGCTCCCAT CACCTGAGCA CACCTGTATG GTGCTGCTGA    240
GCCCCTGAA TTGGCATTAT GGGCACGTGC GTCTCCTCCA TTCCATGGAG CTCCTCGAG    299

```

(2) INFORMATION FOR SEQ ID NO:431:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:431:

```

GTTACATGAC ACTGTTAATG ATTGCATTG GCTTGCTGTG GGGGCATCTC TTGCGGATCA    60
AACCCACGCA GAGCGTCTTC ATTTCCACGT GTCTGTCCTT GTCAAGCACA CCCCTCGTGT    120
CCAGGTTTCT CATGGGCAGT GCTCGGGGTG ACAAAGAAGG CGACATTGAC TACAGCACCG    180
TGCTCCTCGG CATGCTGGTG ACGCAGGACG TGCAGCTCGG GCTCTTCATG GCCGTCATGC    240
CGACTCTCAT ACAGGCGGGC GCCAGTGCAT CTCTAGCAT TGTCTGGGAA GTTCTCCGAA    300
TCCTGGTTTT GATTGGTCAG ATTCTTTTTT CACTAGCGGC GGCTCTCGAG                                350

```

(2) INFORMATION FOR SEQ ID NO:432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:432:

```

GAATTCGGCC TTCATGGCCT ACCAGGTTCT TGCTGCCCTG CGACTCCAGT ATCTGCAGGG    60
GGATTATACT CTGCACGCTG CCATCCCACC TCTCGAAGAG GTTTATTCCC TGCAGAGACT    120
CAAGGCCCGC ATCAGCCAGT CAACCAAAAC CTTACCCCCT TGTGAACGGC TGGAGAAGAG    180
GCGGACGAGC TTCCTAGAGG GGACCCTGAG GCGGAGCTTC CGGACAGGAT CCGTGGTCCG    240

```


GCAGAAGGTC GAGGAGGAGC AGATGCTGGA CATGTGGATT AAGGAAGAAG TCTCCTCTGC 300
TCGAG 305

(2) INFORMATION FOR SEQ ID NO:433:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 273 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:433:

GAATTCGGCC TCATGGCCTA CTCCTCAGCC CCTCATCTTG CCTCCACCCA GCTGTCCAT 60
 TTTTGCCACA TCGTGGCCCG CAGCCCCAGA GTCACCTGCC ATGTCACCAT CCTCCTCCTC 120
 CTTTGAATC CTCTCCGAC ACTGTGGCCC TTGTCTCAGG GCCACAAGC TGAAGTGTGG 180
 CATAGCTCTC TCTTCTTCTC CAAGAAGACT CAGCAGCCTA CATTCCCAT CTGGGTATGT 240
 GCCATTGGGT TGGATGTCCC CACTTATCTC GAG 273

(2) INFORMATION FOR SEQ ID NO:434:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 324 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:434:

CGAGTGAGCG GCGGGGACAG TGCTTGTGAA ACTGAACACA ACAAAGTAT GGATATGGGA 60
 AACCAACATC CTTCTATTAG TAGGCTTCAG GAAATCCAAA AGGAAGTAAA AAGTGTAGAA 120
 CAGCAAGTTA TCGGCTTCAG TGGTCTGTCA GATGACAAGA ATTACAAGAA ACTGGAGAGG 180
 ATTCTAACAA AACAGCTTTT TGAAATAGAC TCTGTAGATA CTGAAGGAAA AGGAGATATT 240
 CAGCAAGCTA GGAAGCGGGC AGCACAGGAG ACAGAACGTC TTCTCAAAGA GTTGGAGCAG 300
 AATGCAAACT ACCCACACT CGAG 324

(2) INFORMATION FOR SEQ ID NO:435:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 548 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:435:

GAATTCGGCC TTCATGGCCT AAATGATCAA ATTTTGGCTT ACATATTTTG CAACAGTGGT 60
 ATAACACAAA GAAGTAAGCA AATATGGCAG AAGTGTGGTG GCTTTGGCGT CTACTTTTGA 120
 CCATAGTGGT GGCCCTGTTA TTCGTGGCTC CCGGGGTTCC TACACATCCT TCCCGATGGA 180
 AGAAGGGGTT GGCCAAAAAG GTCAGCCAGC TGATGGGTTG GACCAAGAAA GACAGAGTGA 240
 TAAGAATGAG TGACACCATG TTCTATCATT TTGTATTAGA TGCACCAAAA AACTATTCTG 300
 TTATTGTGAT GCTTACTGCT GCTCTCCACG CGTTCAGTTC ATGTGTCATG TGCAAAGGTG 360
 CTGCTGAAGA ATTTCAATC TTGGCAAATT CCTATCAACG CCCTGGTGCA TTCACCACAA 420

AGGTATTTTT TGCAATGGTG GATTATGATG AAAGCCCTGA GGTCTTTGAA GCGCTCCAGG	480
TAACGTCAGT TCCGAGTTTC TTCCACTTTT CTGCCCAATG GAAATTTACA ACAGATGACA	540
GTCTCGAG	548

(2) INFORMATION FOR SEQ ID NO:436:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:436:

GAATTCGGCC TTCATGGCCT AAAATGAAAT TCAGACAAAA TCACTGGCAC CAAAAATGGT	60
TTATTCTGAG CTGTCTTCAC TTGACTATT TGGGGGGCTT CTCTCAAGTA CAGATGTGGG	120
TTGGGGTCCC CTGGAGCAGG CAGGATTGGC AGTAAGAGAT ATTGGCCACT CAAGTCTACT	180
GTGTGTGTGT GCCTCTGGAA GAGTGAAGAA TGGACTTCAA AAGTAACATC AAAAATCTAA	240
CTGCCACCAT CTTGGAGACA TTTGCAGGG CTTTCCTTTC AAGTCTTTCA AGTACAGGAC	300
ATCTCGAG	308

(2) INFORMATION FOR SEQ ID NO:437:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:437:

GAACAGAAGA GATCCCCTCG GCCCCACGC CATATGACCA AAGTCACACC AGGTTTCAGAG	60
CTGCCCCTC CCAATGGAAC CACCTTATCA TCTAACCTCA CTGGTGGCAT GCCCTTCATT	120
GATGTGCCCA CTCCCATCTC CTCTGCAAGT TCAGAAGCTG CCTCAGCAGT GGTCAGTCCC	180
TCTACAGACA GTGGCCTGGA ATTCTCCTCC CAAACCACTT CCAAGGAAGA CCTTACTGAT	240
CTAGAGCAAC CTGGCTCTCC AGGGTACAGC ACAGCTACAG AGCCTGGAAG CAGTGAGCTA	300
GGTGTTCCTG AGCAGCCTGA CCTCCAGGAA GGGACCCATG TGGAAAAGTC CCAGTCAGCA	360
TCTGTGGAGT CCATCCCTGA AGTGTTAGAG GAGTGCACGT CCCCTGCCGA CCAACTCGAG	420

(2) INFORMATION FOR SEQ ID NO:438:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:438:

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCT TCTCACTGCA CCTGGATGGC	60
AACGTGCTGG ACCACTTCTC GGAGCTGCGC AGCGTCGAGG GGCTGCAGGA GGGCTCTGTG	120
CTGCGTGTGG TGGAAAGAGC GTACACGGTG CGTGAGGCCC GCATCCACGT GCGCCATGTC	180
CGAGACCTGC TCAAGAGCCT GGACCCATCC GATGCCTTCA ACGGGGTTGA CTGCAACTCC	240

TTGTCCTTCC TGAGTGTCTT CACCGACGGC GACCTCGAG

279

(2) INFORMATION FOR SEQ ID NO:439:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 351 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:439:

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCA CCCAGCCTTC TTCTTTTCAT	60
TATAACCTTT ATACCACAGT AAGCTGTTGC ATCATTCAAA TGACTCTGCA TCCTATATTG	120
AATATTCTCC ATTATTCTCT AATATCTTTG GGGGTACCCA GGATTACAGG GTTCTGGGCA	180
TACATGTAA TGCTTTTGCC AGGACTTTTC TTTTATTCA TTGTCGTGAC CCATTGTCTT	240
TGCTTATATT TAAAGTTTTT GCTCTTGATA TCATTGGTTC TTTCTAAGT CACTTTTCT	300
GGTAAGTCTT TTGGAATGAA TCATACATAT CTCACTTACG GAGCTCTCGA G	351

(2) INFORMATION FOR SEQ ID NO:440:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 412 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:440:

GAATTCGGCC TTCATGGCCT ACCAATACTC ATAATTAAAA GTTTTTCGTT GTCAAAACAT	60
TTTACAGTT CAGGAATCAC AGTCCTATTT CATCTTTGA AATAAAAGTT AAAGTCCATT	120
TTTCTTAAGC CTTATTATAC CATTATCCAA AAACACTACC TAGCATTCAT CTTAGTTTTT	180
CATATCTCCT TAGCAGATAG TTTAGTATAT TCCATTGTC TTATTGAGG TTTAAAAAAA	240
GTGTGGAAG AAGTTTCTCA GGAGTTCAGC AAGCCTTCC ATCTATCTTC TATTTTAAAA	300
GAATGTGATT TATTGTTTTT ATGAATAAAA TATACCTCGT GTGTTTCTCA TATGATGTT	360
CATTACATTA ATCATCCATT AAGTAAATGT TTTGTGCTG CAAAAACTCG AG	412

(2) INFORMATION FOR SEQ ID NO:441:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 292 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:441:

GAATTCGGCC TTCATGCCTA GCCAGGAGGA GGAGGACCCT ATGAACAAAC TCAAGGGCCA	60
GAAGATCGTG TCCTGCCGCA TCTGCAAGGG CGACCACTGG ACCACCCGCT GCCCTACAA	120
GGATACGCTG GGGCCCATGC AGAAGGAGCT GGCCGAGCAG CTGGGCCTGT CTAAGGGCA	180
GAAGGAGAAG CTGCCGGGAG AGCTAGAGCC GGTGCAGGCC ACGCAGAACA AGACAGGGAA	240
GTATGTGCCG CCGAGCCTGC GCGACGGGGC CAGCCGCCGC GGGGAACCTG AG	292

(2) INFORMATION FOR SEQ ID NO:442:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 222 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:442:

```
GAATTCGGCC TTCATGGCCT ACCGCCTCGC TGCCTGGACA CCTGTCCGTG CCACCCCTGGT    60
CACTGAGCAG GACATCCGCG TCTGTGGCCC CTGGGACCCT GCCCCCGACA GCCAGGCCTG    120
GGTTTGTCTT TTTAGGTAGA GTGCCTGGTC CAGGTCATTG GAGGAGAGTC CACATGGCCA    180
CCTCTGGCGT GTTCTAGAGA GGCCCTCCCG TCTAGGCTCG AG                        222
```

(2) INFORMATION FOR SEQ ID NO:443:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 205 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:443:

```
CTTTATGACA GCCATGAGCT TTTTCCGGTG CATTGCAATT GTTTTTCCAG TCCAGAACAT    60
TAATTTGGTT ACACAGAAAA AAGCCAGGTT TGTGTGTGTA GGTATTTGGA TTTTGTGAT    120
TTTGACCAGT TCTCCATTTC TAATGGCCAA ACCACAAAAA GATGAGAAAA ATAATACCAA    180
GTGCTTTGAG CCCCCACTAC TCGAG                                           205
```

(2) INFORMATION FOR SEQ ID NO:444:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 178 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:444:

```
GAATTCGGCC TTCATGGCCT ACCTGCCTCC CTCCTTGCTT CTGCTCTGC TAACTCAACT    60
CTGCCTTCCT CTTTTTCATT CTTCTACTCT GCCCTATATG GAGGACAAAT GGACACCAGG    120
GGTGCTAACC TTATTGGTGC CTGCCCCAGC CTACCCAGG TGCAAGCAGA CTCTCGAG      178
```

(2) INFORMATION FOR SEQ ID NO:445:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:445:

```

GAATTCGGCC TTCATGGCCT AGAAAGCCAC AACTTTTTTA GTTTTAACT TCAAAGGCTT    60
CTTTCTCTTT AAAAAAATT ATTTTAAATA TAGAGTCAAA AAATTGGATG TATTATTTTG    120
AGCTTCTAAT TGCTGCCACT TGGAGATGTC CAAGTAAGAA GGCCTTCTTT TTACATGGGA    180
TGAATTGTGC ACTTCTACTG ATGATGACTA CAGCAGAAGT GATGTTATAC GTACAGGCAC    240
TTGAACTCGA G                                     251

```

(2) INFORMATION FOR SEQ ID NO:446:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 301 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:446:

```

GAATTCGGCC TTCATGGCCT AGGGCTTATA TTTTAACTGA ACTATTATTA AATAAAAACA    60
AAATAAAATC TTATCATATA GGTGTAATCT GTTCTAAGGA AAAAATCCTT CTATCAAGAC    120
TAAACGTCTA ACTGAATACA GAATGACATT TCATGCCTTA AGGTCTCTGT CCATGTTGTT    180
CCTTCTTTCT ACTGTCCTTT ACTGTATTAG TTCAAAACAT TCTAATTCAC TCTCCAAAAC    240
CCAATTCAAA CATCACCATC AGAAAGTCTT CCATGATGGG CCAGGTGTGG CGGCCCTCGA    300
G                                     301

```

(2) INFORMATION FOR SEQ ID NO:447:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 150 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:447:

```

GAATTCGGCC TTCATGGCCT AGCTGAAATG CTTTCTATTG GATACTATCT GGGCATATTA    60
CTTCCTGTGG TTCACTGTCT GGGTGACAGG ATTCATAGAA GCCCAAACCT TAGCACCACG    120
CAGCATACCC TTGTAACAAA GCGACTCGAG                                     150

```

(2) INFORMATION FOR SEQ ID NO:448:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 226 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:448:

```

GAATTCGGCC TTCATGGCCT AATTGATTT TATTAGGTTT AAATTGTATT TCTTCAAATT    60
TCATAAACTA TAGCATTTAT CTCCATATTT TTAATAAATG ATCACAAATA AATCACTGTT    120
AATATCTCCA TTTACACTTT TACAACCTCT GCTATTGCTG GATTTTTTCAT CCTATGATAT    180

```

GTAAACCAA TTAAAATAC ATTTAAAGAA TCACAGCTGT CTCGAG

226

(2) INFORMATION FOR SEQ ID NO:449:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:449:

GAATTCGGCC	TTCATGGCCT	AAGACTGGGG	GCATGTACCC	CACCTACTTT	CTGCACCTGG	60
ACCGTGAGGA	TGGGAAGAAG	GTAAGGTTGG	TCTGGGCATG	TTATCATCTA	GGCTTTACAG	120
CCCTTTGAAA	TCCTAGGGGC	TGAAATGTGA	CTGGAAGTCT	CATATCTACC	GCTGACCTCT	180
CAGTTCCTCA	AAGAACTGC	CTTCGTGTCT	GGTCTGTGCA	CATCTTTGTG	TTTTCCAGTG	240
CATTGTGTG	TGTGCACATA	TGTGCGTTTG	GGAGCTGACG	CAACGGAGAG	AGTCTGTGTG	300
AGTGGCTCTC	ATGACTGTGT	GCAGACCAGA	GGCTGAGTCT	GGAATATGAC	CTCATTCCAC	360
TCCCCAAGGT	GTTCTCCTG	GCGGGAAGGA	AGAGAAAGAA	GAGTAAACT	TCCAATTACC	420
TCATCTCTGT	GGACCCACA	GACTTGTCTC	GAG			453

(2) INFORMATION FOR SEQ ID NO:450:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:450:

GAATTCGGCC	TTCATGGCCT	AAAAGCAAAT	TAAGTTGTTT	TGAAAAGAAA	GTATAGATTA	60
ATTTTGTGTTT	CTGTTTAAAT	TTTATCTCCT	TGTTAAAGAT	TTTTTTTCC	TGGGCAGAAA	120
ACTTGGCATT	TTTAGGCGTA	GATACCTTAC	CTTACAATGC	CAAAATGAAT	TTAATTCCAG	180
TACTCAGGTT	TTTCCCTTTA	ACAGACTCTA	TGTGTACCAG	GCATTGAATT	CTAGACCTGC	240
CTCGAG						246

(2) INFORMATION FOR SEQ ID NO:451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:451:

GAATTCGGCC	TTCATGGCCT	AGTTTGGTGG	GGTTGAAGTT	GATGGCAAAC	TCATGGGAGA	60
CCTTCCAGTC	TGGGGGTAAC	TGGGCCCCGA	ATCCCAGAGC	TGGAAACATC	TTATCACTGT	120
CGTAGTCCTG	AATGATCTGC	CCAACAGCCC	AGATGGCCGA	CAGATATTCT	TTGGTGCCCA	180
TAGGGTTGAT	ATAGTGCAAA	GAGGAAGGGT	CGAGGGGATT	CCCGTTGGAG	GCTGTAAAGT	240
CTATCCAAC	GGTGAACATG	AGCTGGCAGC	CTCCCAGGAT	GTAGTCAAGG	AAGGAGTAGT	300
CTCGGTTTAT	CTTGCAAGAT	CGCAGGATGA	TGATGCCCGA	GTTTTTATAG	TTCTTCTTCT	360

TCCTCTGCTT CTTGGGGTTG ATGCACTCGA ACTCCAGCGG GACGCTGTCT CGAG

414

(2) INFORMATION FOR SEQ ID NO:452:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:452:

GAATTCGGCC	TTCATGGCCT	ACACACTGAC	TGACAGACCA	CGGTATGCCT	TGCACCACCC	60
TGGCTGCTGG	GGTCCAAAGA	GGGATCTGGT	AGACCTGGGC	TGGAATCTCA	GCTTCACCAT	120
TTACCATCTG	GGTGGCCAAT	GGAGTGTAC	TTGGCCTCTC	TGAGCCTCGG	TTTGCTCGT	180
CTCTGAAACA	GTAAGATACC	TCCCTTTGGC	TGTTGTGATG	AGGATGAAGG	TTAGCCTATG	240
CCCAGTAGTA	TGCCTGTCCC	TTCATCGATG	CCTGCTCATC	TCACTCTTGC	TCTGGAAACA	300
CCCCTAGTAG	AGGCGCAGAG	GGGCAGGGCC	CACCCACCC	ACCAAACGT	GGTGCAGAAT	360
GAGGTGATCT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:453:

CGGTCCGTCC	GCCGCCACCA	CCCCTCCGG	ACACAGAACA	TCCAGTCATG	GATAAAAATG	60
AGCTGGTTCA	GAAGGCCAAA	CTGGCCGAGC	AGGCTGAGCG	ATATGATGAC	ATGGCAGCCT	120
GCATGAAGTC	TGTAAGTGA	CAAGGAGCTG	AATTATCCAA	TGAGGAGAGG	AATCTTCTCT	180
CAGTTGCTTA	TAAAAATGTT	GTAGGAGCCC	GTAGGTCATC	TTGGAGGGTC	GTCTCAAGTA	240
TTGAACAAA	GACGGAAGGT	GCTGAGAAAA	AACAGCAGAT	GGCTCGAG		288

(2) INFORMATION FOR SEQ ID NO:454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:454:

GAATTCGGCC	TTCATGGCCT	AAGAAGTGTC	TCCTGTATCC	ACCTCTTCCT	GGCCTCCCTT	60
CCCCCACTTC	CTGGTCCCTG	TCCACTCCTC	AGGTTGGTGC	TCTCACTTCT	TGAAAGCTCT	120
AGGCACCCCC	GCCTCCCGCC	AGGCTCCCCG	TTGGCTCCTG	GCAGGCCAGC	TGAGAATGAA	180
CAGGAGATGG	AGGCAGGCAG	CCCAGGCTGC	AGAGGTGAGG	GATGTGGGGC	CAGGCCCAGA	240
GGGCTCAGCC	TAGAGGCTTC	CAATCTCAGA	TTCTCCTGCC	TGTGGTCATC	TGTTTGTCCA	300
TCACCCAGG	ACAGGGCAGA	CAGAGGGGCA	AAGCACTGGG	GGCCCCAGAG	CCTAGCTTCC	360
CCTCAGCCTG	GGGGAACTC	GAG				383

(2) INFORMATION FOR SEQ ID NO:455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:455:

```

AGAGCACGTC AATGCCATGA GGGGCCTGCA AAGCAGCAAG GAGCTCAAGG CTGAGCTGGA      60
CGGGGAGAAG GGCCGGGACT CAGGGGAGGA GGCCCATGAC TATGAGGTGG ACATCAATGG      120
TTTAGAGATC CTTGAATGCA AATACAGGGT GGCAGTAACT GAGGTGATTG ATCTGAAAGC      180
TGAAATTAAG GCCTTAAAGG AGAAATATAA TAAATCTGTA GAAAACTACA CTGATGAGAA      240
GGCCAAGTAT GAGAGTAAAA TCCAGATGTA TGATGAGCAG GTGACAAGCC TTGAGAAGAC      300
CACCAAGGAG AGTGGTGAGA AGATGGCCCA CATGGAGAAG GAGTTGCAAA AGATGACCAG      360
CATAGCCAAC GAAATCACA GTACCCTTAA TACGGCCCAG AATCTCGAG      409

```

(2) INFORMATION FOR SEQ ID NO:456:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:456:

```

GAATTCGGCC TTCATGGCCT AAATTTTCATG AAAAACAAAT GGCTTAAACC CAGGGAAGCA      60
AGGATTATAA TTGATTTTTT TGAGCAATGT CTCTTTTGGT TACAAAGTAA AAGGTAAAT      120
AAAAGTTTAA AAGCATTGAG AAAGAATGTT CTTTGGTTTT TTCACTCAGT AACCTAAAGT      180
TTAATGACCC TTTACAGTGC TGATAACAC TTAATTTTTT GCAGTAGGCA TTGCTAGTTC      240
AAATTGAAGG AAGGTGCGCA GGCTCATGCC TATAGTCCCA ACTACTTAGG AGGCTAAGGC      300
AGGGGGACGC CCTCGAG      317

```

(2) INFORMATION FOR SEQ ID NO:457:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:457:

```

GAATTCGGCT TCATGGCCTA CTGCTCTTTG GCTAAGGTGG CAGTGTACCT CTAGATCAAC      60
CTGGGCAACA GTCACAAGGG AGTGTGACTT CTTGGCCATA ATAACTCAC TTGATAGTGT      120
TTATGTTATT AATCTGAATG CAACAGAAGA CAAAAGCACA GGCATGCACA CACACAGAAC      180
CCCAAACAC TAAAACTAC CTAAACTG ACTTAGTAAA TAGTAAAAAG GTAATGTTGG      240
GACTTTTAAA CCTTGAATCC ATTAGCCAGG CTTGGGATGA AAGGACCATC TAAATCATG      300
CTAGTCTAAA CCATGCTCTT CCACACAGCT GTTAAAAAAC CACTGGGTAT GAGGAATATG      360
CTAGAAAGAA ATGTTAAAAA TAGATTGTTG GCTCACACTT ATTTTCTTAA TAAATAGGAC      420
CATTATTACT ACCAGGAAAG TCTTATTAT TTTGCCTGAA ATTGGCTTAA AGAAAGTCTC      480

```


ATGACGGGAT GGGATGGGCC GGCACCTCGAG

510

(2) INFORMATION FOR SEQ ID NO:458:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:458:

GAATTCGGCC	TTCATGGCCT	AGCGGAAACA	ACTGAAACTA	ATGGAAGATA	TGGATACAGT	60
AATTAAACCC	CGTCCTCAAG	TAGTAAACA	AAAAAACAG	CGACCAAAAT	CTATTCACAG	120
AGATCATATT	GAATCCCCCA	AAACACCAAT	AAAGGGTCCT	CCAGTCTCTA	GCCTTCTTT	180
GGCATCGCTG	AACACGGGTG	ATAACGAGAG	TGTACATTCA	GGCAAGAGGA	CGCCAAGATC	240
AGAGTCTGTA	GAAGGCTTCT	TATCTCCAAG	TCGTTGTGGC	AGTCGAAATG	GAGAAAAAGA	300
CTGGGAGAAAT	GCATCAACAA	CTTCTTCAGT	GGCTTCTGGA	ACAGAATATA	CAGGACCAAA	360
GCTCTACAAA	GAACACCTCG	AG				382

(2) INFORMATION FOR SEQ ID NO:459:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:459:

GAATTCGGCC	TTCATGGCCT	ACTGAGTCCC	AGGCCGGGGC	CCTGCCCCAG	CCAGGGCTGG	60
GACTCTGCAG	TTGGGAGCTT	GTCCAGCTGC	CCCCTCTAAT	GCTTTTCTCC	TCCAGGACAC	120
AGGGAGCCTC	CGGAAGCACA	GTAGTCCCCG	TGTGTACCT	TAGGCTGACC	TCTGTCCCCA	180
GGGGTGACGT	AATGCTGTCA	CTGTCTTGAA	TTCTTCATCG	TTTAACAGGG	AGCCCAGTGT	240
TTTACCAAAA	AGCAGAATTG	GATTTTTTTT	TTAAGTCGAT	AAATTTTAC	TCAAGGAATT	300
CCATGTTGTG	ATTCTTTCCA	CTGTCCATCA	AGGTCACCTT	AGATCCTCTA	AAGAGCTAGA	360
GTCAAAAGAT	TTATCTTCAA	GTTAGTCCTT	TTAATGAAA	CCGATGCTTA	TTTTAATCCA	420
GTCAGCCCTC	GAG					433

(2) INFORMATION FOR SEQ ID NO:460:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:460:

GTCCGGCTAA	AGTAATCCAG	TCACCTGCTG	CTGATACTAG	AAGGGCTGAG	ATGTCACAAA	60
CAAAATTTTAC	CCCTGACACT	CTTGCCCAGA	ATGAAGGGAA	GGCTATGTCT	TATCAGTGTA	120
GCCTTTGTAA	GTTTCTATCA	TCATCCTTTT	CCGTGTTAAA	AGATCATATT	AAGCAACATG	180
GTCAGCAAAA	TGAAGTGATA	CTGATGTGCT	CAGAGTGCCA	TATTACATCT	AGAAGCCAGG	240

AGGAACTTGA AGCCACGTG GTGAATGACC ATGACAATGA TGCCAATATC CACACCGAAC 300
TCGAG 305

(2) INFORMATION FOR SEQ ID NO:461:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 563 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:461:

GAATTCGGCC TTCATGGCCT AAGAAATATC AGTCCAAGCA AGAGGAATTA CAGAAAGATA 60
TGCAAGGAAG TGCACAGGCA TTGGCTGAAG TAGTGAAAAA CACAGAGAAC TTCTTAAAAG 120
AGAATGGTGA AAAGCTGTCA CAGGAAGATA AGGCTTTGAT TGAACAGAAA CTTAATGAAG 180
CTAAGATAAA GTGTGAACAG CTTAATTAA AAGCAGAACA GTCTAAAAAG GAGCTGGATA 240
AAGTTGTGAC AACAGCAATC AAGGAAGAAA CTGAAAAGGT AGCAGCAGTG AAGCAGCTGG 300
AAGAGAGCAA AACCAAAATA GAAAACCTTT TGGACTGGTT GTCAAATGTT GACAAAGACT 360
CAGAAAGGCG AGGGACAAAA CACAAACAGG TAATCGAACA GAACGGGACC CATTTTCAAG 420
AAGGTGATGG CAAGTCAGCA ATTGGAGAAG AGGATGAAGT TAATGGTAAC CTGTTGGAGA 480
CTGATGTTGA TGGCAAGTT GGAACCACTC AGGAGAATCT GAATCAGCAA TATCAGAAAG 540
TTAAGGCCCA ACATGGACTC GAG 563

(2) INFORMATION FOR SEQ ID NO:462:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:462:

GCGGCTGTGA AGATGGCGGC GGCTGCGTGG CTTCAGGTGT TGCCTGTCAT TCTTCTGCTT 60
CTGGGAGCTC ACCCGTCACC ACTGTCGTTT TTCAGTGCGG GACCGGCAAC CGTAGCTGCT 120
GCCGACCGGT CCAAATGGCA CATTCCGATA CCGTCGGGGA AAAATTATTT TAGTTTGGGA 180
AAGATCCTCT TCAGAAATAC CACTATCTTC CTGAAGTTTG ATGGAGAACC TTGTGACCTG 240
TCTTTGAATA TAACCTGGTA TCTGAAAAGC GCTGATTGTT ACAATGAAAT CTATAACTTC 300
AAGGCAGAAG AAGTAGAGTT GTATTGGAA AAACCTTAAGG AAAAAAGAGG CTTGTCTGGG 360
AAATATCAAA CATCATCAA ATTGTTCCAG AACTGCAGTG AACTCTTTAA AACACAGACC 420
TTTTCTGGAG ATTTTATGCA TCGACTGCCT CTTTATAGGAG AAAACAGGA GCTCGAG 477

(2) INFORMATION FOR SEQ ID NO:463:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:463:

```

GTTGCACTCC TGTGTACTC TTTTAGAGGT GGAAAAGAGG TGGATACTGA GATCTAAGAG      60
GAAAGGATAG TCATTACAGT TCTGAGATAT GCGCTCTCTC TATTGTTCTC GAACACAAAAG      120
GGATAGTCTC TTTTCTGGAG CTGATGTCCC TGCTTGGAGG TTAGCCCCAA AACATGGCTC      180
TTGTATTGTT CTAAGAGAAA AGGCTTTCAT TTTGGTTCTT CTGATTGGTG TTACCTACTG      240
CCTAATATGT GTTCATTTTT TGACAGAGAG GCAGACTATT GAAAAAGTCT GTGTGAACAG      300
AGAGCAGTTC ATTAAGCCCA TTGCTTTCAG TAATGTGGCC TTGACCCCTT CTGCTTCCCC      360
CTTCTCCCAT GACGAGCTCG AG                                         382

```

(2) INFORMATION FOR SEQ ID NO:464:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:464:

```

GACCTGCCT CAAGGACATG GGTGGACATA TGGGCGGACT CTCAGGGACA ACCAAAGTGA      60
TGATCACACT GACCGATGTC AATGACAACC CACCAAAGTT TCCGCAGAGC GTATACCAGA      120
TGTCTGTGTC AGAAGCAGCC GTCCCTGGGG AGGAAGTAGG AAGAGTGAAA GCTAAAGATC      180
CAGACATTGG AGAAAATGGC TTAGTCACAT ACAATATTGT TGATGGAGAT GGTATGGAAT      240
CATTTGAAAT CACAACGGAC TCTAAACAC TCGAG                                         275

```

(2) INFORMATION FOR SEQ ID NO:465:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:465:

```

GTTCTAGACC TACCCCGAAC AGCCCCAAC AGTCAGAGTG GCACAAAATG ACAGTCTCCA      60
AAAAC TGCCC CGACCAAGAT CTCAAAATCA AACTTGCTGT CCGAATGGAT AAGCCTCAAA      120
ACATGAAGCA TTCTGGGTAT TTATGGGCCA TCGGTAAGAA TGTCTGGAAG AGATGGAAGA      180
AAAGGTTTTT TGTATTGGTG CAGGTCAGTC AGTACACGTT TGCCATGTGC AGTTATCGGG      240
AGAAGAAAGC GGAGCCTCAG GAAGTCTTAC AATTGGATGG GTACACTGTG GATTACACCG      300
ACCCCCAGCC AGGTTTGGAG GGTGGCCGAG CCTTCTTCAA TGCTGTCAAG GAGGGAGACA      360
CCGTGATATT TGCCAGTGAC GATGAACAAG ACCGCATCCT GTGGGTCCAG GCCATGTATC      420
GGGCCACGGG GCAGTCACAC AAGCCTGTGC CCCCAGCCCA AGTCCAGAAA CTCAACGCCA      480
TCCTCGAG                                         488

```

(2) INFORMATION FOR SEQ ID NO:466:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:466:

GAATTCGGCC	TTCATGGCCT	AGCCGCTGCG	GTGAGCCTTG	AAGCCTAGGG	CGCGGGCCCCG	60
GGTGGAGCCG	CCGCAGGTGC	AGATCTTGGT	GGTAGTAGCA	AATATTCAAA	CGAGAACTTT	120
GAAGGCCGTC	TGAGCTAAAA	AATAATGCTG	ATTGGCCTC	ATCATATTTA	TGAAGGAGGG	180
AGAAATAGAA	GCATGTATAA	TGTAGAAAAA	CATATCTTAT	CCTTATGTTT	GCATATATTG	240
TTGAATAAAT	ATAGTTTAAT	GAATATGTTT	TCTCACCTTT	CTTTGCTTGC	ACTTCTCGAG	300

(2) INFORMATION FOR SEQ ID NO:467:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:467:

GTTCTAGACC	TGCCTCGAGA	TATGCCGGAA	GGTTGCATGG	CTGGTCCCAG	GGCCAGCACA	60
GGCCCCGAGG	CGGGCTGCCT	GGTTTATTT	TTATTTAACT	TTATTTTCTG	TTTTATGAGT	120
GTGTGTCCGC	CCACCCAC	CCCCTTCAGT	GTAAAGTGGG	GAGCCCTGGG	GGAGTCTCTC	180
CTGCCTCCCA	GCCTCTCCCA	AGACCTCCCC	CCTCGTCACC	AGCCATCCCT	CTGGACCAGG	240
CAGAGGGCGG	ACCGGGTGGG	CAGGGGCTG	AGGGTGGCTC	GGGCCAGCCC	ACCAGCCAAT	300
GGACCCCTCC	TCAGGCCGCC	AGTGTGCCCC	TGCCCCTTTT	TAAAACAAAA	TGCCCTCGTT	360
TGTAAACCCCT	TAACGCTCGA	G				381

(2) INFORMATION FOR SEQ ID NO:468:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:468:

GCTGTCCAAT	TATACTGACC	TGGCCATGAG	CACGGTGAAG	CAGACCCAAG	CCATTCCATA	60
TACTGGTCCC	TTTAATTTGC	TCTGTTACCA	GCTGCAGAAA	TTGACAGGTG	ATGTGGAAGA	120
ATTAGAAATT	CAAGAAAAAC	CTGCTTGAA	AGTGTTCAAA	AATATTACTG	TAATACAAGA	180
ACCAGGCATG	GTGGTATTAG	AATGGCTGGC	AAACCCCTCT	AATGATATGT	ATGCAGATAC	240
AGTAACAAC	GTGATATTGG	AAGTTCAGTC	AAATCCCAAA	ATAAGAAAAG	GCGCAGAACT	300
CGAG						304

(2) INFORMATION FOR SEQ ID NO:469:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:469:

GCGATTGAAT	TCTAGACCAC	CCCGCACTCC	AGCCTGGGCA	ACAGAGCAAG	ACTCTTTCTT	60
AAAAAAATTA	AAAAAAAAG	GAGTACCCAT	TGGGATAAAC	CTCTTTGGAG	GAGAGGACAT	120

AGTACAGAGG TTATACTGCA ACATGGACCC ACCAATAGCC ATGGATAACT TAGTTGGGAT	180
TACCCCTGCC TGCTGTTTAG ATACTTACAT GGACACTAAT TTCTGCCCAT CAACCTCCCT	240
CTCTTTCTCC TTCAATGCCC ATCAACCTCC CCCTCTTTCT CCATCAATGC TATGTTGGTT	300
TTTTTTATTT GCCATCTTGG CAGGTTTAGG GCAGAGCATG CTCGAG	346

(2) INFORMATION FOR SEQ ID NO:470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:470:

GAATTCGGCC TTCATGGCCT AGGATTTTCA GCAAGAATTA AATTATTCTG CATATTGGAC	60
AGGGCCTATT TAGAGGCCTG CACATCTGTT TTTATCCATT TGTGTAACGA TACCGTGTGT	120
GAAAGTAGGT TCATGGATCA GATGAGAAAA GTCAATTCTC TAAGATACCT TCCCTTGTGG	180
CTGTGGATTC TCACCTTGAT GATTCAGCTT TGTGTGATGG AGGTGTCTGC CAGAGAATTG	240
CTGGCCACCC AGCTCCTCAG CCCTCTGCCC CCACCCCAA TACACACACC TTTCTCCATT	300
GTACCAGATG CTGGTCTCGA G	321

(2) INFORMATION FOR SEQ ID NO:471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 417 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:471:

GAATTCGGCT TCATGGCCTA CTTCAATCAC TGTAACCA ATAGCAAACA ACGGAAGAGA	60
CGGGCAGAGT TGAAGCAACA AAGAGAGGAG GAGGCAACAT GGCAAGAGCA GGAAGCCCCT	120
CGGAGAGACA CTCCCACCGA AAGTTCTTGC GCAGTGGCCG CCATTGGCAC CCTGGAAGGC	180
AGCCCCCAG GTATCTCCAC CTCCTTCTTT AGGAAGGTGC TGGGCTGGCC CTTAGGCTG	240
CCGAGGGACC TGTGTAACG GATGCAGGGA CTCCTGCAAG CTGCTGGCCT CCATATCAGG	300
GACAATGCTT ACAACTACTG CTACATGTAC GAGCTCCTGA GCCTGGGGCT GCCACTCCTC	360
TGGGCGTTCT CTGAGGTCTT GGCAGCCATG TACAGGGAAT CTGAGGGCTC CCTCGAG	417

(2) INFORMATION FOR SEQ ID NO:472:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:472:

GAATTCGGCC TTCATGGCCT ACAAGAGGCA GCTTATAGAC AACCGCAAGC TCATTGAGAC	60
GCAATGGAA CGGTTCAAAG TTGTGGAACG AGAGACCAA ACCAAAGCTT ACAGCAAAGA	120
GGGCTGGGC CTGGCCAGA AGGTAGATCC TGCCAGAAG GAGAAGGAAG AGGTTGGCCA	180

GTGGCTCAG	AATACCATCG	ACACGCTCAA	CATGCAGGTG	GACCAGTTTG	AGAGTGAAGT	240
GGAGTCACTG	TCAGTGCAGA	CACGCAAGAA	GAAGGGCGAC	AAGGATCAGA	AGCAGGACCG	300
GATTGAGGGC	TTGAAGCAGC	AGCATCTCGA	G			331

(2) INFORMATION FOR SEQ ID NO:473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:473:

GAATTCGGCC	TTCATGGCCT	AGAGGTGCTT	CAGTGGTACA	ATCAGTTAGC	ACACAGTACG	60
TATACAGCAG	TATGTGTGTG	AGAAATATT	TTAAATATAA	GAATTATCAA	AAATTATAAG	120
AAGACCATCC	CTTAACTGA	ATAGTTTCAC	CAAAAATCAG	AAAAATATGT	AAGTGATACA	180
TTTGTTTCT	TGGATATAGC	AATGTACCAC	CTTGCATAAA	TGAGACTATT	AAAAATGATCA	240
CCTGAGGTCA	GAAGTTCGAG					260

(2) INFORMATION FOR SEQ ID NO:474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 511 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:474:

GAATTCGGCC	TTCATGGCCT	ACAAAGATTT	GAGGAAAAGA	GGTTCAAATT	GGACCACTCA	60
GTGAGTAGCA	CCAATGGCCA	CAGGTGGCAG	ATATTTCAAG	ATTGGTTGGG	AACTGACCAA	120
GATAACCTTG	ATTGGGCCAA	TGTCAATCTT	ATGTTGGAGT	TACTAGTGCA	GAAGAAGAAA	180
CAACTGGAAG	CAGAATCACA	TGCAGCCCAA	CTACAGATTC	TTATGGAATT	CCTCAAGGTT	240
GCAAGAAGAA	ATAAGAGAGA	GCAACTGGAA	CAGATCCAGA	AGGAGCTAAG	TGTTTTGGAA	300
GAGGATATTA	AGAGAGTGGA	AGAAATGAGT	GGCTTATACT	CTCCTGTCAG	TGAGGATAGC	360
ACAGTGCCTC	AATTTGAAGC	TCCTTCTCCA	TCACACAGTA	GTATTATTGA	TTCCACAGAA	420
TACAGCCAAC	CTCCAGGTTT	CAGTGGCAGT	TCTCAGACAA	AGAAACAGCC	TTGGTATAAT	480
AGCACGTTAG	CATCAAGACT	GAAAACTCGA	G			511

(2) INFORMATION FOR SEQ ID NO:475:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 610 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:475:

GAATTCGGCC	TTCATGGCCT	AGTCACAGCT	GTCTATTTTT	GTCAGTGTG	GAACATTGTT	60
CATCGTGATT	TAAAAGCTGA	AAATTTACTT	CTGGATGCCA	ATCTGAATAT	CAAAATAGCA	120
GATTTTGTT	TCAGTAACCT	CTTCACTCCT	GGGCAGCTGC	TGAAGACCTG	GTGTGGCAGC	180

```

CCTCCCTATG CTGCACCTGA ACTCTTTGAA GGAAAAGAAT ATGATGGGCC CAAAGTGGAC      240
ATCTGGAGCC TTGGAGTTGT CCTCTACGTG CTTGTGTGCG GTGCCCTGCC ATTTGATGGA      300
AGCACACTGC AGAATCTGCG GGCCCGCGTG CTGAGTGGAA AGTTCCGCAT CCCATTTTTT      360
ATGTCCACAG AATGTGAGCA TTTGATCCGC CATATGTTGG TGTTAGATCC CAATAAGCGC      420
CTCTCCATGG AGCAGATCTG CAAGCACAAG TGGATGAAGC TAGGGGACGC CGATCCCAAC      480
TTTGACAGGT TAATAGCTGA ATGCCAACAA CTAAAGGAAG AAAGACAGGT GGACCCCTG      540
AATGAGGATG TCCTCTTGGC CATGGAGGAC ATGGGACTGG ACAAAGAACA GACACAGAAG      600
GCGGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:476:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 409 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:476:

```

GGAGATTGGC CACCTCCAAG ATATGGTAAG GAAAAGTGAA CAAGGTCTTG GCTCTGCAGA      60
AGGACTTATT GCTAGTCTTC AGGACTCCCA GGAAAGGCTT CAGAATGAGC TTGACTTGAC      120
TAAAGACAGC CTAAAGGAGA CCAAGGATGC TCTATTAAAT GTGGAGGGTG AGCTAGAACA      180
AGAAAGGCAA CAGCATGAAG AAACAATTGC TGCCATGAAA GAAGAAGAGA AGCTCAAAGT      240
GGACAAAATG GCCCATGACT TAGAAATTAA GTGGACTGAA AATCTTAGAC AAGAGTGTTT      300
TAAACTTCGT GAAGAGTTAA GGCTTCAACA TGAAGAGGAT AAGAAGTCAG CAATGTCTCA      360
ACTTTTGCGT TTGAAAGATC GAGAGAAAAA TGCAGCAGAG AAACCTCGAG      409

```

(2) INFORMATION FOR SEQ ID NO:477:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 272 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:477:

```

GTATGCCTGT TCCAGACCAG CCTTCATCAG CCTCAGAGAA GACGAGTTCC CTGAGCCCCG      60
GCTTAAACAC CTCCAACGGG GATGGCTCTG AAACAGAAAC CACCTCTGCC ATCCTCGCCT      120
CAGTCAAAGA ACAGGAATTA CAGTTTGAAA GGCTGACCCG AGAGCTGGAG GCTGAACGGC      180
AGATCGTAGC CAGCCAGCTG GAGCGATGCA AGCTCGGATC CGAGACTGGC AGCATGAGCA      240
GCATGAGTTC AGCAGAAGAG CGGATACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:478:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 284 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:478:

```

GAATTCGGCC TTCATGGCCT ATGCGTGGGG GTGGGGGGGC AGGCTAGAAA GGAGCCCTCC      60
CTCCTCGGGG TGTCTAGGGT GTGCTGGCCA CTGGAAGATT GGAGTCGCTG ACCCAGTGCT      120
GACCCTGACC CTTGGCTGGG TCCACTCTGC AGACTCCACC TGAGGAGACC CACCCAGGGT      180
GAAGCTCGGT GCCCAGGCCT GAACTGAGCC CGGCCGGGTG CAAGGGCTGA GGTGTGAGGT      240
CGGCCCAGGC CTCTTCCAG GCCTGAGGGT GGCTACAGCT CGAG                        284

```

(2) INFORMATION FOR SEQ ID NO:479:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 352 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:479:

```

GAATTCGGCC TTCATGGCCT ACTAAATTTT CCAAAACGTT GATTGCATA ATACAGTGGT      60
ATGTGCAATG GATAAATTGC CGTTATTTCA AAAATTAAAA TTCTCATTTT CTTTCTTTT      120
TTTCCCCCTT GTCACACT TCAAACTCC CGTTAGATCA GCATTCTACT ACAAGAGTGA      180
AAGGAAAACC CTAACAGATC TGTCCTAGTG ATTTTACCTT TGTCTAGAA GGCGCTCCTT      240
TCAGGGTTGT GGTATTCTTA GGTTAGCGGA GCTTTTTCCT CTTTCCCCA CCCATCTCCC      300
CAATATTGCC CATTATTAAT TAACCTCTTT CTTTGGTTGG AACGACCTCG AG                352

```

(2) INFORMATION FOR SEQ ID NO:480:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 263 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:480:

```

GAATTCGGCC TTCATGGCCT ATTAAAGAA TGTTCTTTCA TTAAAGACC AAAAAGAAGT      60
TAAACTTAA ATTGGGTGAT TTGTGGGCAG CTAATGCAG CTTTGTAAAT AGCTGAGTGA      120
ACTTTCAATT ATGAAATCTG TGGAGCTTGA CAAATCACA AAAGGAAAAT TACTGGGGCA      180
AAATTAGACC TCAAGTCTGC CTCTACTGTG TCTCATCA CCATGTAGAA GAATGGGCGT      240
ACAGTATATA CCGTGTTCCTC GAG                263

```

(2) INFORMATION FOR SEQ ID NO:481:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 379 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:481:

```

GGAGCAGGAA GAAATGCAAG AGGAGATGGA GAAGCTGCGA GAGGAAAACG AGACTCTCAA      60
GAACGAGATC GATGAGCTGA GAACCGAGAT GGACGAGATG AGGGACACTT TCTTCGAGGA      120
GGATGCCTGT CAACTGCAGG AAATGCGCCA CGAGTTGGAG AGAGCCAACA AAAACTGCCG      180
GATCCTGCAG TACCGCTCC GCAAAGCCGA GCGCAAAAGG CTCCGCTACG CCCAGACCGG      240

```


GGAAATCGAC GGGGAGCTGT TGCGCAGCCT GGAGCAGGAC CTCAAGGTTG CAAAGGATGT	300
ATCTGTGAGA CTTACCATG AATTAGAAAA TGTGAAGAA AAGAGAACAA CAACAGAAGA	360
TGAAAACGAG AATCTCGAG	379

(2) INFORMATION FOR SEQ ID NO:482:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 301 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:482:

GAATTCGCC TTCATGCTTT CTAGGCAAGA GGTCAACAGA AGATTGAGAG AAAGAGGAGA	60
ACCAATCAGA CTATTTGGAG AGACTGATTA TGATGCTTTT CAACGTTTAA GGAAATAGA	120
GATCCTCACA CCAGAAGTTA ACAAGGATT GAGGAATGAT TTGAAAGCAG CCTTGGATAA	180
GATTGATCAG CAGTACCTCA ATGAAATCGT CGGCGGTCAG GAGCCTGGAG AGGAAGACAC	240
ACAGAATGAT CTGAAAGTTC ATGAGGAAAA CACCACAATT GAAGAGTCAG AGGCCCTCGA	300
G	301

(2) INFORMATION FOR SEQ ID NO:483:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 168 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:483:

TGGTCTCCAG AAATGCTTTG GGTTCATCTT TCATTGCTGC AAGGAACTTC CATGCCTCTA	60
ACACTCATCT TCAAAAGACT GGGACTGCTG AGATGTCCTC TATTCTTGAA GAGCGTATTC	120
TTGGAGCTGA TACCTCTGTT GATCTTGAAG AAATGGGCT ATCTCGAG	168

(2) INFORMATION FOR SEQ ID NO:484:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 452 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:484:

GCAAGCTCTC CATGGAACCC CCTGCCAAAA CAGAAGAGAT AAAACTGGAA AAGGCTGAGA	60
CAGAGTCCTG CCCAGGCCAA GAGGAGCCTA AATTGGAGGA ACAGAATGGT AGTAAGGTAG	120
AAGGAAACGC TGAGCCCTGT CCTGTCTCCT CAGCACAGAG TCCTCCCAT TCTGCTGGGG	180
CCCCTGCTGC CAAAGGAGAC TCAGGGAATG AACTTCTGAA AACTTGTGTT AAAAATAAAA	240
AGTCATCTTC TCTTTTGAAT CAAAAACCTG AGGGCAGTAT TTGTTAGAA GATGACTGTA	300
CAAAGGATAA TAACTAGTT GAGAAGCAGA ACCCAGCTGA AGGACTGCAA ACTTTGGGGG	360
CTCAAATGCA AGGTGGTTT GGATGTGGCA ACCAGTTGCC AAAACAGAT GGAGGAAGTG	420
AAACCAAGAA ACAGCGAAGC AAAGGACTCG AG	452

(2) INFORMATION FOR SEQ ID NO:485:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:485:

```

GTTTGTAAT CACCTGATGA TGGTGATATA GCTGTGGCCA ACGAAATGTC AAGGGAAGTC      60
TGCTGGGGAA GGTAGACGTA GGATAGGAGT ATGGGAAAAA ATTATTCACT CAAAAGCATG      120
ATGCACAGAG GAGCTATGAT CTTTCTTGT TTTCTCACT GGATGTTGTC ATGCTGTAT      180
GTACTTCCTG GAACTGTGGC ACCATCTTAC AACCATGAAA GGAGCTCACA TGAATCATG      240
TTGAACATAG CAGAGCGGGA AGATGGAAGG AATCCGAGAT CTATGTTTGA TGTTAAGCGA      300
TGATGTTAAA AACTTAAAAA ACTCCAGAAC TCTCTTACCC CTGGTGCTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:486:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:486:

```

GAATTCGGCC TTCATGGCCT ACTCAGCTGG AAGCTTTACT CCCTCCTCGA CAGAAAGTGA      60
GGATTACAGA TGACATGGAT CAGGTGGAGC TGAAGGAGTT TTGTCCCAAT GAGCAGAACT      120
GGCGTCAGCA CAGGGAGGCC TACGAGGAGG ACGAAGACGG GCCCCAGGCT GGAGTGCAGT      180
GCCAGACGGC ATGACGTGGT GCGGGGCAGC GTGGCCCCAC CGGACTAGCA CATGATGAAT      240
GTAAAGTTGG CACAATGAAA ATGACATCGC TTTAATGGCC TTGTGTTTGG GATGTCTGT      300
GTATGTGTTT AGCATTCTTA ATTGCTGAGT GTCTTTTGG CTTTCTTTT GGTGTAACT      360
TAAGTTATAG CTTAATTAT ATTAAATGT TTTAAGTATA AATCACCTCT AGGCCTCGAG      420

```

(2) INFORMATION FOR SEQ ID NO:487:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:487:

```

GGAGTGTCAG GAATAACCGC TCAGGTTGAG TGTAATAATA TTTTATGGTC CCATCAGCAT      60
CAACCTGCCT TAATGCTTCT TTGGTTGTCT CTTAGCTAG TTCTTATTTT ACAGCACATG      120
ATATATGAAG TGATTTCACA CCATGCCCAA GATACGGGCC ACCCACCAGC TACATGGCAT      180
GATGACTCTG CAGGCCGAAC GGCAGCCTTG ATAATTATAA GGCCATGGGT AATAGCCCCC      240
CAGGGGTTCA CAGATCTTCT GGCAGTGGGT GTAGCTCCGC CTACATTCTA TACAACAGAT      300
TCCTTCGCCT GCCTCGAG                                318

```

(2) INFORMATION FOR SEQ ID NO:488:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:488:

```

GAATTCGGCC TTCATGGCCT AGGTGTTTGC TTTAAGGAGG AATAGAAAA TCAGGTGGTC      60
ACTACTACAA GGGAAAGGGG AATGTGGTTT CAAAAAGGGT TTGCCTTAT TTATTTTAT      120
AGTAGATACT TATTAATCAA ACATTTAAGA GCAACTCAGT AAGTATTGT CCAGAATGAA      180
CTGTTCTCAA GACTAGGTTT ACTGCTTGAC ATTAGAGGTT AAGGTGTGC AATTCTGAGT      240
CTTGTTTTTT ATTACTACCA ACCCCCACCC CCGCCGATAT TACTTCATCT CCCTCCAAGG      300
TCACTGAAGT TTTTCATAAC TATTTAACA GATATTGCAA TAAATGTACA GTAATTTAAC      360
TATCCTTCTT GCTGGGCATG TCAAAGTGT TTCTATTATT ACAGATAATG CTGCAATGAA      420
TCTTTATTTA TATAATACAC TTTTATCCAG TTGTCATTTT TTCTTTGTCT TATATTCTCA      480
CATGGAA                                           487

```

(2) INFORMATION FOR SEQ ID NO:489:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:489:

```

GCGATTGAAT TCTAGACCTG CCTCGAGACA AAAACTGTGA ATAGTGAGTG ATTTAAAAAA      60
AAAAAATAAA CTGAAAGGAA AATTGTTGAA TGTTTGAATC TTGCCTAGTC CCCTCACCCC      120
CAAGGCTGGC TTCTAGAGTT AAGCTCGAG                                           149

```

(2) INFORMATION FOR SEQ ID NO:490:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:490:

```

GCAAATTTTG GAAGATTTAG ACCATTATTT CTCAAAATAT TTCTTACCTG CTCTCTCCTC      60
TTTCTCCAC TCCTCCCAT CACCTTCTGG CACTTCCATT GTTCATATAT TGATATGCTT      120
AATGATGTTT CTGAAGATTT ATTCATTTTT CCTTATTCC TTTTATTCT GTTCCTCAGC      180
CCAGATCATT TCAATGCACA TATCCTCAAG TTTGCTGATT CTTTCATTTT CTGCTCAGAT      240
CTGCTGCTGG CCCCTCGAG                                           259

```

(2) INFORMATION FOR SEQ ID NO:491:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:491:

GAATTCGGCC	TTCATGGCCT	ACAAATGTTT	AATCAGAGAC	TCATATTCAC	CTTTAAGTAA	60
AAAACATACT	TCTTTCCCCC	TAATAGTCAC	AGCATTCTGC	AGAGCTAAAG	AAGGAGACCA	120
GGAGTCTGTG	GGAGCAAAGA	TCATTTTGTG	AAGCTAGAGG	TCCAATTAA	AAGCAGTTGC	180
TGCTACAAAT	TAAAACATAT	TTGCATTCTG	CCTAAAATAG	TTGTCTCTTT	GAACGTTGGG	240
TGCCTTTTTT	AGGTGCTTT	GTGAATAATA	TGCACAAAAT	GAAAATGTTA	AAAAAACAT	300
GTAGCCTGCT	AACCCTCGAG					320

(2) INFORMATION FOR SEQ ID NO:492:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 224 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:492:

GAATTCTAGA	CCTGCCTCCA	GCCACTTCAA	ACCTTTGGTG	ACCAAAGTGG	GGTAAAAACA	60
AGCACCTGCG	TGCGTTGTGG	TTATTCTATG	CTCTCCAATA	TATATAAATT	TTAAGAAGTT	120
TTTCTGAGG	TGGTCAGTTC	TTAAACCAAG	AAAGTGGTAG	TAGTTGATTT	TAATTAGTGT	180
AAAGTTGTCT	TCGTAACCTC	CGTGTGGTT	GGAAATAGCT	CGAG		224

(2) INFORMATION FOR SEQ ID NO:493:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 320 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:493:

GAATTGCCTT	CATGGCCTAC	CGAATCAGAC	AGAAGAAAGC	CCAGGGCTCC	ACTTCTTCTA	60
CAAGGTTGCA	TGAGCCCGAG	AAGAATGCCA	GAGAAATAAC	ACAGGACACA	AATGATATCA	120
CATATGCAGA	CCTGAACCTG	CCCAAGGGGA	AGAAGCCTGC	TCCCCAGGCT	GCGGAGCCCCA	180
ACAACCACAC	GGAGTATGCC	AGCATTGAGA	CCAGCCCGCA	GCCCCGCTCG	GAGGACACCC	240
TCACCTATGC	TGACCTGGAC	ATGGTCCACC	TCAACCGGAC	CCCCAAGCAG	CCGGCCCCCA	300
AGCCTGAGCC	GTCCCTCGAG					320

(2) INFORMATION FOR SEQ ID NO:494:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 504 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:494:

GAATTCGGCC	TTCATGGCCT	AGGTAGCTCT	ATGGTTTTCC	TCGCGTTCTT	GAGTCGGGAA	60
ATGGCCGCTG	TGTGGTTGCA	ACGGAGATAA	ATCCCCGAA	CCGCGATTCTG	GCGTGTGAGG	120
AATTCGAATT	TAGAGTTTAA	TTTCTCAGAG	CATTCTCTCC	AGGAAGAATT	TTTACAGTAT	180
CTCAAAGACT	TCACTTGACT	TCTTGATCCT	GCATAAAACC	AAGGAGAAAA	GAAATGGGTC	240
GCTCCAATTC	TAGATCACAT	TCTTCAAGGT	CAAAGTCTAG	ATCACAGTCT	AGTTCTCGAT	300
CAAGATCAAG	ATCTCATTCT	AGAAAGAAGC	GATACAGTTC	TAGGTCTCGT	TCCAGAACAT	360
ATTCAAGGTC	TCGTAGTAGA	GATCGTATGT	ATTCTAGAGA	TTATCGTCGC	GATTACAGAA	420
ATAATAGAGG	AATGAGACGA	CCTTATGGGT	ACAGAGGAAG	GGGTAGAGGG	TATTATCAAG	480
GAGGAGGAGG	TAGAAACCT	CGAG				504

(2) INFORMATION FOR SEQ ID NO:495:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:495:

GAATTCGGCC	TTCATGGCCT	ACCAACTTAG	TCATTTGAAG	CCCAAGAGTC	TAATTTTATA	60
TGCCCTGCCA	ATGTCCTCAT	CTATTGCAGA	ATGNATAATT	ATCTATTGT	TTTGGACTAT	120
ATGTTACAAA	AATTTAAAC	ATAAGATCCT	CTCTCTATAT	TTCATTATTG	GTGAACCCAC	180
ATTGCTCGAG						190

(2) INFORMATION FOR SEQ ID NO:496:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:496:

GAATTCGGCC	TTCATGGCCT	AGGTAAGAAA	ATCGTCAATG	AATTGTGGCA	TGACCAGGTG	60
GAGAGTAAGT	GTCATAAAGA	GGGATAGTGG	ATAGTATAAT	GTCAGGCACC	TCAAAGGAAC	120
TGGGCAGGGA	GTTAGGGAGT	AAAAAGGGCG	GTGGTCTGGA	AGCAGAAAGG	AGGAGCAGTG	180
GTCCAGTAGG	GGCTGCAGAG	CTGCAAGGCT	TTGCCTCAAT	CCTGTCAAAG	GCAACTTCAA	240
GCTTTCCAGG	AGCCATACTC	CTTCATTGT	TCATTACTTT	CTAGATTAGG	AAATCACCAC	300
TCGAG						305

(2) INFORMATION FOR SEQ ID NO:497:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:497:

```

GAATTCGGCC TTCATGGCCT AGGTGGACCA ATGTACAGCA CTCAGGTTCA TGGCCAACTG      60
GGTGGACTAT TTCAGTACTC TACAGGTGCC TCAGTGGAGG GAGAGCCCAT TGTCCAGGTG      120
CTTCCTGGGA CAATACCAGA GCGCTCTGGG AAAAGGGCTG CTTGCAGGCA CGAGGGCTCA      180
CAATGAGCCA TGGTGGGCCA CCGCCACGGC CCATGCAGCC TAATAGCAAG CCAAGGCAGG      240
AAGCTGTGAG AGCTGCTCAA CAGTGCCCCC TAGGGACTGG TTAATTCTCTG ACCCTAACCT      300
CCGGAATCT GCTGTCAAAG GCAGATTCT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:498:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 160 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:498:

```

GAATTAGGGG CTTTTTCATC CTTAGGAGAC CTGAGTCCTC AAGAAAACCC TTTTCTGGAA      60
GTATCTGCTC CTTCAGAAACA TTTTATAGAA AAGAATAATA CAAAACACAC AACTGCAAGA      120
AATGCCTTTG AAGAAAATGA TTTTATGGAA AACACTCGAG                                     160

```

(2) INFORMATION FOR SEQ ID NO:499:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:499:

```

GAATTCGGCC TTCATGGCCT ACTCGATCTC CTGACCTCGT GGTCCACCCG CCTCGGCCTC      60
CCAAAGTTCT GGGATTACAG ACGTGAGCCA CCGCGCCCGG CCTTGTCCCTG GATTTTTTAA      120
CCAAGCACTA TTATTTATAG TTGCGTTAAA ATAAATAGGG ATGGGTTTGA TAAGTCACCA      180
CTTGGTGCTT TAAATTCTGC CATCATCTTT TCTAGGAGTG TAAGATATAG AGATACACAT      240
AAGCAGAAAA TTTTTTTTAA CATGAGGATA CTCGAG                                     276

```

(2) INFORMATION FOR SEQ ID NO:500:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:500:

```

GAATTCGGCC TTCTGGCCTA GACCTGCCTC TGATATGTAC TTGGTTTTTA AAAACCCATT      60
TTGTTCTCTC TTGTTTCCTC TCTATTTTCA CCTAGTATCA GAAGGCCAGG CGAGACTGCA      120
ACACTGCTCA TCACCCCGCG GCGTGATCCC TGCTCTTAGG TGCTGGGCAG AGGGGAAGGG      180
TGGTCAGGGT GAGGATGGTG AGGGAGGGCT GGTGAGGGGC TCAGAGGAAT ACTTGAACA      240
ACAGCAGTGT CTCGAG                                     256

```

(2) INFORMATION FOR SEQ ID NO:501:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 635 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:501:

```

GAATTCGGCC TTCATGGCCT AGTGGTTTTG TTGTTGTTGT CGGAGACAGG GCCTCGCTTG      60
GTCTCCCAGG CTAGAGTGCA GTGGCATGAT CACGACTCAC TGCAGTCTCG ACCTTCTGGG      120
CTCAAGTGAT CCTCCTGTGT CAGCCTCCCA CACAGCTGGG ACTACAGGCA CATGCCACCA      180
CATCCAGCTA ATTTAAAAAA CATTTTTTTT GTAGAAATAG GGTCTTACCA TGTTGCCCAG      240
GCTAGTCTCA AATTCCGGGG CTCAAGCAAT CCTCCACCT CACCTTCCCA AAGTGCTGGG      300
ATTACAGGCA TGAGTCACCA TACTTGGCCC GAGTGAGCCA AGATTGCACC ACTGCACTCC      360
AGCCTGGGCT ACAGAGCAAG ACACATATCT AGATCCNNAA AGGAAAAAAA AAAAAGAAGG      420
AGAAAGAACC AGAGAAACAT AAGGAAGAGT GAGAGGAAGA AAGAAAGATG CAATTTGGGA      480
AGAAATGAAA AAGAAATGAA TAAAGAATAA AATAATGTAA CGGTCAATAA ATAGGACTTG      540
TGAATGGAGG CCTTTAGGCC AAAGGCTATG ATTAATTTC AAGCTATGTTA CTGAAGTCCA      600
TAAACAAAGG ACTCAGATCT AAATGGGTAC TCGAG                                     635

```

(2) INFORMATION FOR SEQ ID NO:502:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:502:

```

GAATTCGGCC TTCATGGCCT ACCCGTAGAA ATCCCCCTTT CTCTAATAGC GAGGCTCTAA      60
CCACACAGCC TACAATGCTG CGTCTCCCAT CTTAACTCTT TGCCTTTGCC ACCAACTGGC      120
CCTCTTCTTA CTTGATGAGT GTAACAAGAA AGGAGAGTCT TGCAGTGATT AAGGTCTCTC      180
TTTGGACTCT CCCCTCTTAT GTACCTCTTT TAGTCATTTT GCTTCATAGC TGTTCTCTGC      240
TAGAAATGGG AAATGCCTAA GAAGATGACT TCCCAACTGC AAGTCACAAA GGAATGGAGG      300
CTCTAATTGA ATTTTCAAGC ATCTCCTGAG GATCAGAAAG TAATTTCTTC TCAAAGGGTA      360
CTTCCACTGA TGGAACAAA GTGGAAGGAA AGATGCTCAG GTACAGAGAA GGAATGTCTT      420
TGGTCCTCTT GCCATCTATA GGGGCGCTCG AG                                     452

```

(2) INFORMATION FOR SEQ ID NO:503:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:503:

```

GAATTCGGCC TTCATGGCCT ACAAATTGT CTTGACATAA GTAATTTGGG TATGCTGTAT      60
AAAGGCTTCT AAGAATTAAG AAACATGGCC CGGGTTGCAA ATTTTAATGC ATGACTACCT      120

```

```

TTTTTCTAT AGAATATAGC TTTTGTGAGA TTCTCAGCAG TGGCTCTGAT CCAGAAAACA      180
TTAAGAACCA CTGGTCATGA GTGGTGATT TCAGCTTTT TGGTCTTAAC CCACTTAGGT      240
GGGACAGAAG CTCCTTATCT CACCTATACC ATCCAGCATC CTCGAG                      286

```

(2) INFORMATION FOR SEQ ID NO:504:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:504:

```

GAATTCAGCC TTCATGGCCT AGAGGGGTTT AGGATTCAAA GCAAAGGGGA GACAGCTACT      60
AAGTAAACTA CAAAATAATT GCTAAACTGA AAATTGTATA AAGTGACTG GACAGATGAT      120
GTTCTTAATT CTTATCCATG AAATATTTTC TGCCTTCTTA GAGGAAATAG CACCTGACAC      180
AACACTAGCC ACATTGTAGG TGATCAATCA GCACATGTCT AAATAAATTA ATTAATAAAG      240
AATCAATTAG AAATTCCACT GAAAATTCTT CTTAAATATA ACCAACTTCA TTATGACAAG      300
CTATGAATAT AGAGCTTACA TACATGTTAT ATATCAATAT GTGAGTAGAT AAAGAATGAA      360
TGCCTTAAAT TGTGGATTT TTTATGTTT TTGTCTTGT TTTGGAGATG GGGTCTCACT      420
CGAG                                                                424

```

(2) INFORMATION FOR SEQ ID NO:505:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:505:

```

GAATTACTCA GTTTTCAGGT TCTTCCTAGC TCGGGGCTTT TAAATTTTGA AATCTAAACA      60
TTCTTTCCCA CCATCCTTTT TGACTGTTGA CCTTGGTTTT CTCTCTAAG TTTCTGTCCC      120
TCTGCTTCTT TACTTTTTTT CCTTTTGA TTTCTATCTT ATCTGTCTT TGTTCACTTT      180
TTAATGCTAT ATATGGATCT CGAG                                          204

```

(2) INFORMATION FOR SEQ ID NO:506:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 218 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:506:

```

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGAGA TGTACAGTAA TAAGTATGCA      60
CAGAAATGTT AGATTATTTT TGAAGATGTG GAGAACTAC TGTTATTTT GCTTATATTC      120
TTCTCTAAAA ATTCACTAAA TGAATAACAG TTATTGTTT TGCTATTCAA GATAATTATA      180
AAAAATCTA TTATAGCTAA TCTTCACATG AACTCGAG                          218

```


(2) INFORMATION FOR SEQ ID NO:507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:507:

```

GAAGTTTAAC ATTCAACTG TTGGTAAAAT CTCCTGGTG CCACCTTGTC GCACCCCTCT 60
GTTATGAGGC ACAGTTAGTG GGTTTATGAG AGGTTTGTTT AGTGAAGCTC CTGCCACTGT 120
AGACCTAAAT GTTCTCTCC CTGTTGAAGT GACCTGCCTT CCTCTTAGT ACCTAACACA 180
GTTGGCAAAG AGCATGGCTA ACTCAAACCC TTTTCTTTGG GGGCAGGCTT CCCTTCTCT 240
CTGGCAGGTA TATTAAAAA TTACAAAATA GTAAATTGTC CAAATTTTTC TTGGTGTGTA 300
GCAAGGCATA AAGACTGAAA AATATCTTAT GAATTAGTTC ACTTCCCTCG AG 352

```

(2) INFORMATION FOR SEQ ID NO:508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:508:

```

GAATTCGGCC TTCATGGCCT AAAATGATAC AGTGTGCAGA ACTGGACCCA GTAGGGAATG 60
ATAAAATGTA CAGATGTGCA GAACAGGACT TGGTAGGACT CAGCAGAGAA AACAGGAGGA 120
GAGATGAAAA TGATATGGTG TGCAGAACTG GACTCAGTAA GGTGCGGAAA GGGGAAGGAT 180
TCTGACAGAA TCCAGCACAA AACAGAGAG GGTGCAGAAA AAGAGATTTG GTCACCTAGA 240
CGTGTGGAGT TGGAGGAGCC TGTGGGAAAT CCAGGATCTC GAG 283

```

(2) INFORMATION FOR SEQ ID NO:509:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:509:

```

GAATTCGGCC TCATGGCCTA CTCTCCTTTC TTAAGTTGTG TACTTGGGGG CACTTTTGAT 60
TTTGGTCCCA CATCATTGAG GAAGCTGGCC CAGAGTTCGT CCTCCTTCTT TTTCTGGCA 120
TCCTCTGATC CAATGCCTTT TTCCTGCTCT GCAGCGTCAT CTTCTCCTC ACTACTGCTT 180
CCCTCAGATT CTGAATTGGC ATCCTCCTCT TCCTCTTCTT CTAATGAGAG GCCACCTTGT 240
CTTCTCTTCC TGGCTGGAAT GCTCTGGGCC TTTCTTTTTT TCCCTTGGGT TTTCTGTGTC 300
TGCTCTTCAC CATTAGGCCA TGAAG 325

```

(2) INFORMATION FOR SEQ ID NO:510:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 281 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:510:

```
GAATTCGGCC TTCATGGCCT AGACAGGAGG TCATTGGGGA TTTTAGAAGG TTACACTGGA      60
TACATTTCCA TTAAGCTTCA CGATATCCCA CAGGTCCATT CTGTGTGAAA TGGTCTAAAA      120
ATTTCTGTTC CTCATGCTTC ATTTTCTTCT TTTAGTAATA TTCCTAATTG TGTAAAATAG      180
TATTTCTTTT CATTATCTT AATTATGTTA TATTAAGATA TCATGTGTAT GCTTAAATTA      240
TACTTTTGGG CTTCAAATGA GTGACCCAC TCAGACTCGA G                          281
```

(2) INFORMATION FOR SEQ ID NO:511:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 250 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:511:

```
GAATTCGGCC TTCATGGCCT AATTCCCTTG ACTCAAGACA GCTAACTTCA TTTTCAGAAC      60
TGTTTTAAAC CTTTGTGTGC TGGTTTATAA AATAATGTGT GTAATCCTTG TGCTTTCCT      120
GATACCAGAC TGTTCCCGT GGTGGTTAG AATATATTTT GTTTGATGT TTATATGGC      180
ATGTTTAGAT GTCAGGTTTA GTCTTCTGAA GATGAAGTTC AGCCATTTG TATCAAACAG      240
CACGCTCGAG                                250
```

(2) INFORMATION FOR SEQ ID NO:512:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 233 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:512:

```
GAATTCGGCC TTCATGGCCT AATTGATTCT AATCTTTCCC AAACAGTGCT GTGGCAATGT      60
ATGAAAGTAA TAAAAATAAT CCTTTTCTG TTAACAAAAA AATTGCTGTT ACTTGCTGTT      120
TTGTTATGCT TTTGCTGGAG ATTTCCAC CCATCTTAAA GCAGCAACTT CAGGATGGGG      180
GAATCAAGCA AAACCATGGT GAAGAGATTC ATTTAAAGAG GACAAGTCTC GAG              233
```

(2) INFORMATION FOR SEQ ID NO:513:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 358 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:513:

GAATTCGGCC	TTCATGGCCT	AGTCACCTTT	TGTGGGAACT	TCTCTCAGCG	AAGCGGAGCA	60
TGCGAATTTG	ACATCATGAT	TGTCTGAAAA	TTGGTAAGCC	ACTATCCCAG	AAAGAGCTCC	120
CTATGCCCAG	GGCTTGCAAT	GCTAAGAGAA	GGAGGCAGGA	GAGAGACAGG	GAGCGACACT	180
ACATTTGGTG	GGGTGAGGAT	ATGAGGTTCC	TTGGACATCA	TGGCCTCCAG	TGAATATGTG	240
GGTGATGGCT	TGGAACCTAA	GCTTTTTCG	TAGTGCCCCA	CAAAAGAGTA	CCCTCCACAA	300
CCCATCTGTG	GACCACAGCA	GTGCCTCTCA	ACAAACATGT	GCCCCAAGGA	GTCTCGAG	358

(2) INFORMATION FOR SEQ ID NO:514:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:514:

GAATTCGGCC	TTCATGGCCT	AGAATAGAGG	AAAATAGCCG	CCTGGTGGCT	AGACAATTTA	60
GGTGTAGAAA	ACACATTTAT	ATGGTTCTTT	GAATGTAACA	GTGGTAAAGA	ATATAGGTTT	120
AGTTGTTGCT	GCTAAGTAGG	GGGAAATGAC	ATTTTATCT	GGTATGTTTG	AGAATAAAGT	180
AAATTTCAAA	ATTGAGATG	ATCGAAGTTT	TTATTTATAA	ACTTAAGTAT	TATTATAATA	240
TGTTACATAT	TTTATTCTTT	AAAAATGTA	ATTCAGAGAG	TGTAACAAAA	TGTACTTCCT	300
CACTTTCTTG	CTTTTGTGTT	CCCAGAAGTA	ACTCGAG			337

(2) INFORMATION FOR SEQ ID NO:515:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:515:

GAAAAGATGG	AAGAAAACCA	CCATAGCACT	GCAGAAGAAC	TACAGGCTAC	TCTACAAGAA	60
TTATCAGACC	AGCAACAAAT	GGTACAGGAA	TTGACAGCTG	AAAATGAGAA	GCTGGTGGAT	120
GAAAAGACGA	TTTATAGAGC	ATCCTTTCAT	CAGCATCGAG	AGAGGGCAGA	GCAGCTAAGT	180
CAAGAAAATG	AGAAGCTGAT	GAATCTTTTA	CAAGAGCGAG	TAAAGAATGA	AGAGCCCACC	240
ACTCAGGAAG	GAAAAATTAT	TGAACTGGAG	CAGAAGTGCA	CAGGTATTCT	TGAACAGGGC	300
CGCTTTGAAA	GAGAGAAGCT	ACTCAACATT	CAGCAGCAGT	TGACCTGTAG	CTTGCGGAGA	360
CTCGAG						366

(2) INFORMATION FOR SEQ ID NO:516:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:516:

```

GCGAGTGAGC CGGGGTAGCA TCACCTCACT CCAGCCTAGG TGATGACAGA GTTAGATTTT      60
GTCTCAAAAA AGAAAAAGAA AACAAATCCA GGATTATTAT TTCTACGTAA ATGTGACATA      120
TTATTCTAT  GATATTATTT CTTTGATCTC GTAGCCACAC TGTTCCTCAAT AATGATTATG      180
AGAAAAAGTA CCCTCTGTTT GAAGGCAATC ATGGGGAAAA TATAATTCAC AAAGTATTTT      240
AAAATTAAAA TCCTGTGTAT TTCAAAAGAC GATGGTCCTA TTTAAGAAA AATAACCTTG      300
CAATTCATTT GCTTTTTCAT TGGCTCGAG                                     329

```

(2) INFORMATION FOR SEQ ID NO:517:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 368 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:517:

```

GAATTCGGCC TTCATGGCCT AGTCCTTTCA AGTACACAGA GAAATTTTGC TTGAATTCT      60
GGAGGAAGAG TCCAGGGTTC GGGAAAAGGG ACTGGGTGGT ATCTATCTGG GGCCCCAGAC      120
AGCGGCACTT CTTTCTTCTG TGCTGGAATT CGGCGAACAA TCATATCATC TTTTCCAAA      180
TCCGGAAGTA CAAGTTCACC TTCTCTACAC TGTAATAATTA TATCTCGCTC TACAGAATCA      240
TCTTGCTCAG AGAACTTTCT AAAGTCTTCA AAAGCTCGGA GAACATATGG ATTGCATGG      300
AAAGCCCCAG TCTTTCTGAC AAAGAAATCA TCATTCTCTA AGTCAGGATC CAGGGCTGCC      360
ATCTCGAG                                     368

```

(2) INFORMATION FOR SEQ ID NO:518:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 397 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:518:

```

GAATTCGGCC TTCATGGCCT ACGCTGAGAT CAAGATTCGG AGTTTGGGCT GCCTAATAGC      60
TGCAATGATA CTGTTGCCT CACTCACCGT GCACCCCATC TTGAGGCTTA TCATCACCAT      120
GGAGATATCC TTCTTCAGCT TCTTCATCTT ACTGTACAGC TTTGCCATTC ATAGATACAT      180
ACCCCTTCATC CTGTGGCCCA TTTCTGACCT CTTCAACGAC CTGATTGCTT GTGCGTTCCT      240
TGTGGGAGCC GTGGTCTTTG CTGTGAGAAG TCGGCGATCC ATGAATCTCC ACTACTTACT      300
TGCTGTGATC CTTATTGGTG CGGCTGGAGT TTTTGCTTTT ATCGATGTGT GTCTTCAAAG      360
AAACCACTTC AGAGGCAAGA AGGCCAAAAA GCTCGAG                                     397

```

(2) INFORMATION FOR SEQ ID NO:519:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 640 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:519:

```

GAATTCGGCC TTCATGCCTA CTTTGGTAAC AGAAGAGAAG ACTGTGGAGC CAGCTACCGT      60
CTCAGAAGAA GCAAAGCCTG CATCTGAACC TGCTCCTGCC CCTGTGGAAC AGCTGGAACA      120
AGTAGACCTG CCCCCAGGAG CAGACCCCGA TAAAGAAGCT GCCATGATGC CTGCGGGTGT      180
TGAGGAAGGT TCATCAGGTG ACCAGCCGCC TTATCTGGAT GCCAAGCCTC CAACTCCCGG      240
GGCCTCGTTT TCCCAGGCAG AGAGCAACGT AGATCCAGAG CCTGACAGTA CCCAGCCACT      300
TTCAAAACCA GCTCAGAAGT CTGAGGAAGC CAATGAGCCA AAGGCCGAAA AGCCAGACGC      360
CACTGCAGAT GCTGAGCCTG ATGCAAACCA GAAAGCCGAA GCTGCTCCTG AGTCTCAGCC      420
CCCAGCTTCT GAAGATTTAG AGGTTGATCC TCCAGTTGCT GCAAAGGATA AAAAGCCAAA      480
CAAAAGCAAG CGTTCAAAGA CCCCTGTTCA GGCAGCTGCA GTGAGTATCG TGGAGAAAGCC      540
CGTCACAAGG AAGAGTGAGA GGATAGACCG GGAAAACTC AAGCGGTCCA ATTCTCCTCG      600
GGGAGAAGCA CAGAAGCCTT TGGAATTAA GACACTCGAG                                640

```

(2) INFORMATION FOR SEQ ID NO:520:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:520:

```

GAATTCGGCC TTCATGGCCT AGCAAGAGAA AGAGAAGTGC AAACACTCCC ACGGCGAAGC      60
GCCCTCCGTG GACGCGGATC CCAAGTTACC CAGTAGCAAG GAGAAGCCCA CTCACTGCTC      120
CGAGTGCGGC AAAGCTTTCA GAACCTACCA CCAGCTGGTC TTGCACTCCA GGGTCCACAA      180
GAAGGACCGG AGGGCCGGCG CGGAGTCGCC CACCATGTCT GTGGACGGGA GGCAGCCGGG      240
GACGTGTTCT CCTGACCTCG CCGCCCTCTT GGATGAAAAT GGAGCCGTGG ATCGAGGGGA      300
AGGTGGTTCT GAAGACGGAT CTGAGGATGG GCTTCCCGAA GGAATCCATC TGGATAAAAA      360
TGATGATGGA GGAAAAATAA AACATCTTAC ATCTTCAAGA GAGTGTAGTT ATTGTGGAAA      420
GTTTTTCCGT TCAAATTATT ACCTCAATAT TCATCTCAGA ACGCTCGAG                                469

```

(2) INFORMATION FOR SEQ ID NO:521:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 202 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:521:

```

GAATTCGGCC TTCATGGCCT ACCCGTTTCC TCTAGTTTCT TCCTGTAGTA CTCCTCTTTT      60
AGATCCTAAG TCTCTTACAA AAGCTTTGAA TACTGTGAAA ATGTTTTTACA TTCCATTTC      120
TTTGTGTTGT TTTTTTAACT GCATTTTACC AGATGTTTGT ATGTTATCGC TTATGTTAAT      180
AGTAATTCCC GCGGCCTTCA TG                                202

```

(2) INFORMATION FOR SEQ ID NO:522:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:522:

```

GAATTCGGCC TTCATGGCCT AAATTTAATG AAGCAAAATT CCATACATCA TTTTGAAAAT      60
AGTGTTCCTT TCCCTGATAG GCCTGTTCTG CATCATTCCT TTAGCTTCCT TCTGCCCTGT      120
TTATCACTTG GTCCCACTTT TATATTTTTC CTCTTCGGTC CAGAATTTCT TATTTAGTTT      180
CTTGATTTT GCCTACTCCC TCCCTTCTCC ATGATTCAGC CTAGTCTTTC CGTCTCTGT      240
GGACTTGGGT GTGCCTTCCT CTGGGCCACC TCGTCTTTTG CTGCTGTTAG CCCTCCCGCC      300
TGCGCACCTG CCACTTCACC CTCGCCTGTG GTCCACTTAC GTTCCACTCA GCCCGGTCAG      360
TCCTGCTTTG TTCTTCTCCA CCGCCTTGGT CTCCCGTGTG TCTTATCTAG CTCTGGTTCC      420
TTCTCGTCTC CACATTTATT TTGTTTCTT CCTGTGCTTG TTAGTCCTTG TGCATTGGC      480
CCTTTTCTCG AG                                         492

```

(2) INFORMATION FOR SEQ ID NO:523:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:523:

```

GAATTCGGCC TTCATGCCTA GGAAATTTCA CCATTGGTTC TCCCCCTTTG TGGGTCAGCA      60
GGTGGTCAAG ACAGGGGGCA GCAGTAAGAA GCTACAGCCC GCCAGCCTGC AGTCTCTGTG      120
GCTCCAGGAC ACCCAGGTCC ATGGAAAGAA ATTATTCCTT AGATTTGATC TAGATGAAGA      180
AATGGGGCCC CCTGGCAGCA GCCCAACACC AGAGCCTCCA CAAAAGAAAG TGCAGAAGGA      240
AGGGGCTGCG GACCCAAAGC AGGTCGGGGA GCCCAGCGGG CAGAAGACCC TTGATGGATC      300
CTCACGGTCT GCAGAGCTCG TCCCCAGGG CGAGGATGAT TCTGAGTATT TGGAGAGAGA      360
CGCCCCTGCA GGAGATGCTG GGAGGTGGCT CGAG                                         394

```

(2) INFORMATION FOR SEQ ID NO:524:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 600 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:524:

```

CGATTGAATT CTAGACCTGA CCAAAGACCT TCCGTACAGA TTGACCGCAG AATGTCAGGG      60
AAAGTTAGGA GAAGAAGTTC TGAGAAGACT GACTACAGAT TGGCTGGCCT GGCTGACCCA      120
GGAACCTCTG AGCAGACTGA CCTCAGATTG TATGGCCTCG TTGACCACAA AACATCTGTA      180
AAGACTCACC ACCAAGTGTA CGGCCAAGCC ACTGAACTAG CTGAACACCA GGCTATTGAC      240
CAAGCTCATA GTAATGCTGA TCAACCTCCA GTTGACAATG CTCACTACAC TGAATCTGAC      300
CAGACTGACC ACTTAGCAGA CAGACAAGCT AATCATAAAG ACCAGCTGTC TTACTATGAA      360
ACACGTGGCC AGTCTGAAGA CAGAATATTT CCCCAGTTAG GCAACAGCAA AGAGGACAAA      420
GAGGCTGACT ACAGAGTACA ACCCTGCAAA TTTGAGGATA GCCAAGTAGA CCTCAATTCC      480
AAGCCTTCAG TTGAAATGGA AACTCAGAA GCAACCACTA TCCCACCCTA CAACCCAGTT      540
GATGCCAGAT TCACCAGTAA ATTCCAAGCA AAAGACCAAG CTCTTTTCCC AAGACTCGAG      600

```

(2) INFORMATION FOR SEQ ID NO:525:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:525:

```
GAATTCGGCC TTCATGGCCT ACTTTCTTCT GCTGGCTTCC ATCTTGCCAC ACTTTCTTGC      60
TCTTCCTTCT AACTGAAAGA CTACTTCTCC ATCCCCTCTG CAGGCTCTTT TGCTCCACCT      120
GATATTTAAA TGTTGGAATG CCTAGAGTTG TTCTGACCCT TCTTTATCTA CCCCATTTC      180
CTCAGTGATC TTATGCAGAG GTCTCCCAA GTTACATGG CTATCCTTGA CCTCCTTCCT      240
GAACTGCAGC TGGTGTCAGC TGCCGTCAC TGGATGTTTA ATCAGCAACT CAAGGTTTAC      300
GTGATGATTA GACCGCAGT ACCCCAGAC TTCCTTATCC CTTAGTTTTC CCCATCTCAT      360
TAAGTTCAC TCCATTACCC TTCTTGATGA AGCCAAGTAT TTCAGAACTA GCCTTGTTTC      420
TTCTTTTCA CTTTCCCCCA TATCAATTCC AGACTACCCA CTCGAG      466
```

(2) INFORMATION FOR SEQ ID NO:526:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 559 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:526:

```
GAATTCGGCC TTCATGGCCT ACATTGTAGA AGAGATCACA GAAACCACAA AAGGTTTTCT      60
GAAGTATATG GATAATCAAT CATTGCAAC TGAAAGTCAG GAAGGAGTTG GTTTGGGACA      120
TTCACCTTCA TCCTATGTGA ATACTAAGGA AATGCTAACC ACCAATCCAA AGACTGAGAA      180
ATTTGAAGCA GACACAGACC ACAGGACAAC TTCTTTTCCT GGTGCTGAGT CCACAGCAGG      240
CAGTGAGCCT GGAAGCCTCA CCCCTGATAA GGAGAAGCCT TCGCAGATGA CAGCTGATAA      300
CACCCAGGCT GCTGCCACCA AGCAACCACT CGAAACTTCC GAGTACACCC TGAGTGTTGA      360
GCCAGAAACT GATAGTCTGC TGGGAGCCCC AGAAGTCACA GTGAGTGTC GACAGCTGT      420
TCCAGCTGCC TCTGCCTTAA GTGATGAGTG GGATGACACC AAATTAGAGA GTGTAAGCCG      480
GATAAGGACC CCAAGCTTG GAGACAATGA AGAGACTCAG GTGAGAACGG AGATGTCTCA      540
GACAGCACAA GGCCTCGAG      559
```

(2) INFORMATION FOR SEQ ID NO:527:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:527:

```
GAATTCGGCC TTCATGGCCT ACGCAGTGGT TCAATTTTCT TCGAAACGGT GTGGTCCCTG      60
CAAAAGGATG TTTCTGTTT TCCATGAGCT GGCTGAAACT TGTCACATCA AAACAATACC      120
CACATTTTCA ATGTTCAAGA AAAGCCAGAA GGTAACCCCTA TTCTCAAGAA TCAAAAGAAT      180
AATTTGCTGT TATAGAAGTG GATTCATGAG CAACCTGATT TTTGAGTTT GTGGAGCCGA      240
TGCTAAAAAA TTGGAAGCCA AGACTCAAGA ATTAATGTAA GCTGATCTCC AAGGCAAAAT      300
ACACTTGTGC CGCTCGAG      318
```

(2) INFORMATION FOR SEQ ID NO:528:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:528:

```

GGCACAGACT TACCGGACAC ACAGGTCATG GGACACAGAG TCATGGGGCA CACAGGTTCA      60
CAGGGCACAC AGGCTCACGG GACACAGAGT CATGGGACAC ACAGGCTCAC AGGGCACACA      120
GGCTCACAGG ACACACAGGT TCATGGGGCA CAGAGTCATG GGGCACAGAC TCACAGACTC      180
ACAGGTCATA GACGCTCATG GGGCGCAGGC TCACAGGGCA CACAGACTCA GGGCACACAG      240
GCTCATGGGG CACAGAGTCA TGGGGCAGGG CTCGAG      276

```

(2) INFORMATION FOR SEQ ID NO:529:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 180 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:529:

```

GAATTCGGCC TTCATGGCCT ATTCTGTTCT TTAAATTTGA ATGAAAGTTT GGCATTTTAA      60
AAAACTTTAG GTGATTTAGG AGTATAATTT TAAGCAGATT TTTAGAGTAC GAGTGTCAC      120
ATATTAACT AAACATTCAA AAATTAGTTA AAATCAATGA ACTTGGGAAG GATCCTCGAG      180

```

(2) INFORMATION FOR SEQ ID NO:530:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 470 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:530:

```

GGGGACAGAA GATGTGCTCC AGGGTCCCTC TGCTGCTGCC GCTGCTCCTG CTACTGGCCC      60
TGGGGCCTGG GGTGCAGGGC TGCCCATCCG GCTGCCAGTG CAGCCAGCCA CAGACAGTCT      120
TGTGCACTGC CCGCCAGGGG ACCACGGTGC CCCGAGACGT GCCACCCGAC ACGGTGGGGC      180
TGTACGTCTT TGAGAACGGC ATCACCATGC TCGACGCAGG CAGCTTTGCC GGCCTGCCGG      240
GCCTGCAGCT CCTGGACCTG TCACAGAACC AGATCGCCAG CCTGCCCAGC GGGGTCTTCC      300
AGCCACTCGC CAACCTCAGC AACCTGGACC TGACGGCCAA CAGGCTGCAT GAAATCACCA      360
ACGAGACCCA GGCCCTTCAG CACCGTTCAC AGTATTTTGA AGGTGTTGTG AAGTGCAATA      420
AGCTGGAAT ACTGGAGACC ATCGTGACA GAATAGTAAG AGCCCTCGAG      470

```

(2) INFORMATION FOR SEQ ID NO:531:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 553 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:531:

```

GAATTCGGCC TTCATGGCCT AGAAAATTCC AGAAAGGATA TTTAAGAAAA TACAATAAAC      60
TATTGGAAAG TACTCCCCTA ACCTCTTTTC TGCATCATCT GTAGATACTA GCTATCTAGG      120
TGGAGTTGAA AGAGTTAAGA ATGTCGATTA AAATCACTCT CAGTGCTTCN TACTATTAAG      180
CAGTAAAAAC TGTCTCTAT TAGACTTTAG AAATAAATGT ACCTGATGTA CCTGATGCTA      240
TGGTCAGGTT ATACTCCTCC TCCCCCAGCT ATCTATATGG AATTGCTTAC CAAAGGATAG      300
TGCGATGTTT CAGGAGGCTG GAGGAAGGGG GGTTCAGTGT GAGAGGGACA GCCCACTGAG      360
AAGTCAAACA TTTCAAAGTT TGGATTGTAT CAAGTGGCAT GTGCTGTGAC CATTTATAAT      420
GTTAGTAGAA ATTTTACAAT AGGTGCTTAT TCTCAAAGCA GGAATTGGTG GCAGATTTTA      480
CAAAAGATGT ATCCTTCCAA TTTGGAATCT TCTCTTTGAC AATTCCTAGA TAAAAAGATG      540
GCCTTGCTC GAG                                     553

```

(2) INFORMATION FOR SEQ ID NO:532:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 843 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:532:

```

GAATTCGGCC AGAGAGGCCT ACTTCTCTTA GTGATTTTCAT GTTTCACCA GTACATTGTG      60
GTGAATACTG AAATATCTTG TTTAATTCAG ATAATTAAAA TGGTGGCAAA GGAAGCTGTT      120
TAGCCAGAGC CCTTCTTGAC TTTGAGGAAC AGTGGTAGTA TAAGACTTGA AGACAGACGT      180
GTAAAAAGTA CTACTCACTG GTAGGCTCAG GTCTGGTTGA TTGACTGATT CTTGAGACGG      240
AATGTGCGTC TGTGCGCTAG GCAGGAGTGC AGTGGCCCAG TCTCGGCTCA CTGCAGCCTC      300
CGTCTCCGGG TCCAAGCGAT TCTCCTGCCT CAGCCTCCCG AGTAGCTGGG ACTACAGGCG      360
CCCGCCACCA CACCGGGCTA ATTTTGTAT TTTTAGTAGA GACGGAGTTT CACAATATTG      420
GTCTCGAACT CCTGACCTCA GGTGATCCAC TCGCCTGGCC CACCCAAAGT GCTGGGATTA      480
CAGGGATGAG CCCCTGCGCC TGGCCTCGGT TGAATTTATT AAACAACTTT TGTGGGCAGC      540
AAGCTGTACG AGGTAACTA TGTGATGAGA AGACTTAGAA ATGGAGAAAA GTTTTATCAG      600
TTCTACATAG GACTTAGTTT GGGAGTTTCT GGAAACTACG TTGGAATCA GTAGTTGCAC      660
ACTAGCTGAA TTCAGCTGTG TAATTTACAG TGATTTGTTA TTTACCAAAT AAGTAGAAGA      720
GGGAATTAAG AAGCTAAAT CTCTGGGTAC TTGTTTGATA TGAATTTGTT AATTGTTTAT      780
ACTCAGGTAA TAAGTGTTAC CTCAGTCATA GCATTTAATA TTTTATCTGA CTGCTCCTCTC      840
GAG                                     843

```

(2) INFORMATION FOR SEQ ID NO:533:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 525 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:533:

```

GAATTCGGCC AAAGAGGCCT ACATCCAGAA ATTTAGGGAC TCAGCCCTGG TCAGGGTGGC      60
AAAGGGTCTG TTTGTCTTC CCCATTAGAC AGAGGTCTTG TCCTGCTACC CTAATTGTAA      120
AGGGGTGCCT GGAAGGGGT GGTAGGGACA TGGTGGCGGT GGAGACTCCG GCCCCACTTC      180
TCCAGGCTTT GCTGACAGG GCCTGCTTTT AATTTTATT TTTATTCCAT GACTTTTAA      240
AAAAGAATCC CGTAACCTCT TTTTCATAAC TTTTGTGTA ACTTTTCATA ATACTGTTT      300
CTACTTTGTT CCCACAAGT TTTTGGCAC AACGTTTTTA CATTTTAT CCCATAACTT      360
TTTCACCCCA TAACTTTTTT AAATAAAGTT ATTTAATAAA ATAACCTTTT ATAAAACCTT      420
AATAAAAGTT TTTTAATTAA CCCATAACTT TTTTATTTG GTTTTAAATA AACACTTGCA      480
TAGTTATATT ACAACTTTGT AAAAATGAAA CACATTATCT CAGGC                      525

```

(2) INFORMATION FOR SEQ ID NO:534:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:534:

```

GAATTCGGCC AAAGAGGCCT AGAAAACCCT TGAAGACATG TTGAAAATAC ATACTCCTGT      60
TAGCCAAGAA GAAAGATTGA TTTTCTAGA CTCCATTAAG TCCAAATCCA AAGACTCTGT      120
GTGGGAAAAA GAAATAGAAA TACTTATAGA GGAAAATGAG GACCTCAAAC AACATGTAT      180
TCAGCTAAAT GAAGAGATTG AAAAGCAAAG GAACACTTTT TCATTTGCTG AAAAAAAGTT      240
TGAAGTTAAC TATCAAGAGT TACAAGAG

```

(2) INFORMATION FOR SEQ ID NO:535:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:535:

```

GGCTTGCAAC TCGGCGATCC CCGACTCCCT TCTTTATGGC GTCGCTCCTG TGCTGTGGGC      60
CGAAGCTGGC CGCCTGCGGC ATCGTCCTCA GCGCCTGGGG AGTGATCATG TTGATAATGC      120
TCGGAATATT TTTCAATGTC CATTCGCTG TGTGATGTA GGACGTTCCC TTCACGGAGA      180
AAGATTTTGA GAATGGCCCC CAGAACATAG ACATTCCTCT CGAG                      224

```

(2) INFORMATION FOR SEQ ID NO:536:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:536:

```

GAATTCGGCC TTCATGGCCT ACCACTCTGG CCCAGCGTC ACTGGCCTAG GGACACATGG      60
GGGTGGGGAT TGTTGGCCT TCCTGGCTTA GGTCTCTGGA AGAGAGAAGA ACCCCATGG      120

```

```
GCAGACCCAG GCCACGGGCA GTACATGCCT CCCACACTAC TGACACCGCC AGTGTCTTCT 180
GTGAAGCCAC CTTTGAGCAA CGGAAAGGAA GGGGGATGGG CAAGATCAGT GCAAGGTTGG 240
CCAAAAGCCT GGGGCTGGCC TTCTGCTGGC ATGAGAGGGC CAGGCCGCCC CCAGCTCCTC 300
GAG 303
```

(2) INFORMATION FOR SEQ ID NO:537:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:537:

```
GAATTCGGCC TTCATGGCCT AGAACAAAAT CTGAAATTCA GAAATAAACA ACAGTTGGAA 60
AATATTTTCC ATTTTTCCTT CTATTAAATA TGATAATTTC AGGTGCAAAG AGTGTTCCTT 120
TTTTTTTTTT TTTCTCCACA GTGCTTTTCA CGGTGGGGAC TAATGGATAT AGAGGGTGGG 180
AGGCCAGAAT AACCAAGTAC CTGGAAGTGA ATCTTTGTGG AGATAATGAA ATAATTTTAT 240
TCGAAAGGTG CAAAAGGAAG TCTTCCATCA CTAGCTCAGC TGTATGGTC CTTGAACTGC 300
CCTTGCCCGT CTGTCTTTT ATTAACTCTT TTTACCTGTC GAGTCTCGAG 350
```

(2) INFORMATION FOR SEQ ID NO:538:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:538:

```
GAATTCGGCC TTCATGGCCT AGAGTTGCAC AGATGTCTTT TGTTAGCTTT GGTGGCGGAG 60
TCATCCTCAC AGACCGTTAC TCAGATAATT AAGTGCCCTG CAAATTTAGT ATCAAATGCA 120
CCTTATGATC GTCTAAACT CAGCCTGCTG ACCAAAGTCT GGAACCAGAT AAAGCCTTAT 180
ATTGCCACA AAGATGTTAA TGTTCTGTG TCAAGTCTCA CACTCTTGGG AGCTATAGTG 240
TCCACCCAGC CACCTTTACC TGAAGTCCAA CTACTCTGC AACAGCCATG TTCTTCTGGA 300
CTCGGTAATA GCAATTCAGC AACCCCTCAC CTCAGCCCTT CGAG 344
```

(2) INFORMATION FOR SEQ ID NO:539:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:539:

```
GAATTCGGCC TTCATGGCCT ACAACTCCAT TAAACCACCA CCAGCTCCCC AAGCCACCCC 60
TTCAGCCATG AAGTTCCTGC TCCTGGTCTT GGCAGCCCTC GGATTCCTGA CCCAGGTGAT 120
CCCAGCCAGT GCAGGTGGGT CAAAATGTGT GAGTAACACC CCAGGATACT GCAGGACATG 180
TTGCCACTGG GGGGAGACAG CATTGTTTAT GTGCAACGCT TCCAGAAAAT GCTGCATCAG 240
```

CTACTCCTTC CTGCCGAAGC CTGACCTACC ACAGCTCATC GGTAACCACT GGCAATCAAG 300
GAGAAGAAAC ACACAAAGGA AAGACAAGAA GCAACCCCTC GAG 343

(2) INFORMATION FOR SEQ ID NO:540:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:540:

GCGATTGAAT TCTGAAGACC TCTCAGCCTC TTATGACCAC TCCTGGCACC CTGTCAAGCA 60
CAGCATCTCT GGTCAGTGGC CCTATAGCCG TACAGACTAC ACCTGGAAAA CAGCTCTCGC 120
TGACCCATCC TGAAATACTA GTTCCTCAAA TCTCAACAGA AGGTGGCATC AGCACAGAAA 180
GGAACCGAGT GATTGTGGAT GCTACCACTG GATTGATCCC TTGACCAGT GTACCCACAA 240
ATCTCGAG 248

(2) INFORMATION FOR SEQ ID NO:541:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:541:

GAATTGGCCT TCATGGCCTA GATTGTCTTT ATAGGAAATG TCTTTAGCAA AATACTACGG 60
GTTCTATAAA ACCCATTAAC GGGTTATCAG TGTCTAGGAC ATAAATGGCT TCTGGTAAGA 120
AAATTAAGGT CTACTCTCCC TAAATACTAT CATAATTACA AAGGTTAAGA AAAAAGAAGT 180
AGAGTAAAC ATGTGTCCCT TAAAAATCAA ACATGAGTGG TCACAAGGTC CTAAGAAGCA 240
GAGAATGAGA ACTCCAGTTG CTTGTTTATC TCTCAGGCTG AGCATGGTTG GTTACAATGA 300
GGGGTAGCAG GAAGAGCACA GCCTTGGACT CCAGTCCAAG GAACTCCAGT CTCTCCTGCA 360
ATTTCCAGT GTTTGACCTT GGGCCACTTA CTGTTCTTTT CTCAGCCTCC ATTTTCATAT 420
CTAAACCTC GAG 433

(2) INFORMATION FOR SEQ ID NO:542:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:542:

GAATTTCGCC TTCATGGCCT AGACACGGGA CATAAAACT TTTAATGAAG GAGGACACAG 60
CTCAGAGCCC TTCCACATGC GGCCCAACCC TGCCCCACGG AGACCGGCCA TGGCAACCGC 120
TCAATCAGAA GGTGTTCTTG ATGCGGCCGG CCACCAGCCT AAGGATGTCC CCGATCTTCT 180
TCTGCCAGTT GGCATGTCC TTGGACACGG CGCACCACAG CTCCCCATGC CGAGGCTCTG 240
CACTCTCACA GCGCTTCCTC ACCTCCTCCT GCTGCTCCTC AGTGCCATGC TGCAGCTCAA 300

```

ACTTGTAGAA GAAGGCCAG GCATCCCCCA GGTCCGAGTC AATCTTCACA GTGCGGTGGA      360
ACCACTCCCT GGCCTTGGTG ATCTTCCGCT GACTCCAAAA CAGCTTGGCC ACGGCCAGGA      420
GCACATGGGG GTCATGCTCA CACTTCTTCA GGGCATCCAC GCTCTTGGTC CTCCTCTGGG      480
GCCTTGCCTC GAG                                         493

```

(2) INFORMATION FOR SEQ ID NO:543:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 325 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:543:

```

GAATTCGGCC TTCATGGCCT AGTCAGGGAG AAGGGAAGGT GAGAAGGGGG GGAAAAAAGA      60
AGCAAAAAGC CCAAAGAAAA AAACATTTTA TATTCATCTG TATAAACATA TCCGCTAAGG      120
CAAAACGCAAT CCGGGTCCGA GGCTGCTGCG CTGGGCTCGG TGCCTCCTAA TTTCTGCAGA      180
TTCTAAGGCC AAAAAATAAA ACCTCTGCAA GTCCGCGTAG CTTCCAGGAC TCCTGGGCAT      240
TTTACTAAAA TAAAGAGTTA TCGAGTTTAA AAAGCAGTGA CGTCGTTATG ACACACACTG      300
AAAGTTGCAT AACTGTGGCC TCGAG                                         325

```

(2) INFORMATION FOR SEQ ID NO:544:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 473 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:544:

```

GAATTCGGCC AAAGAGGCCT AAGAATTCCT TATGAAAGTG ATGCTTGAGT CAAAATATGA      60
TGATGAAGA GAGTTTAAAT AGATTACATA GAATTTTAA TAATGTCGAT TGGTTATATA      120
CTGGGCACTG ATAGCTGATT TTTCTTTGGG GAAAGGTATG TCAGCCTAGT CATTGAGATT      180
CCTTTATTTT TTAAATGTT TTTTCATTTT TTGCTTTGCA TTGCATTCAT TTGCTGAAGA      240
GCTGGCTTGT ACTTTGGCAG GTGTCATACT TGGTTATTCT CCTTAGGATA TTGGCCCAAC      300
AATCTGGGAT TTGTGAAAGG CGCTTCGCTT TTCAGACCTG GGCGTCTGTA TCATGACTAT      360
CATAAATTTA GGATTAAGAC ACCTAGCCTC CTACCAGGAT GAATGAGGTG TCCATGTGAC      420
CTGCTGTGCC CTGGAATTTT ATACATCTTT CTCTCATAGC ACACGGACTC GAG                                         473

```

(2) INFORMATION FOR SEQ ID NO:545:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 120 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:545:

```

GAATTCGGCC AAAGAGGCCT AGTCGAGAAG GAAGAGGGAA GAAGAAAAAC TATAAAAGTG      60
TGCTAAATGT TTTATTTTCT CTGGAAGAAT AGTTATATTC TACTCTTGT GGCTCTCGAG      120

```

(2) INFORMATION FOR SEQ ID NO:546:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:546:

```

GCTAGACCTG CCCCTTAGA AATGGAAAA GCATGCAAGA GAGATGTAA AGGAGACTAT      60
TGGAGCAACT GTGTCCACAC CCTCTGTGAT AGAAATGGAA AAAATATCCC CAGAAGATCG      120
TGGTGAGAAT ATTGGGAAAC ACAAAGTGT ACCCGCAGTG GTAGACATTG AGAAAATACA      180
TGGAACAGGA CTAGAATTGA CCACTAAACA AGGGGAGGCC ATGCTTCCTG CATTTGAAAG      240
TAAACACCA CAAGAGTATG CTGAAGGGAG TCTTGAAGAA ACAATGGAAA ATAATTACCA      300
AAAGGATGCT GAAGGGGATA TTGGAAAGGC TGAAGTGATG CCTGTGAGGT TAGAAATGGA      360
AAATACTTAC CCAAAGGATA CTGAAAGAGA CGGTGGCAAA ACTGAGGTGA TGCCCCCTGC      420
ATTAGAGGTA GTAAATACTT ACCAAAAAAA TGCCAAAGGT TTTACCGGGA ACAATCTCGA      480
G

```

(2) INFORMATION FOR SEQ ID NO:547:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:547:

```

GAATTGGGCC AAAGAGGCCT AGAAACCTGA GGCTGCTGCC CTTTATCTGC CTTACGGTA      60
CTGTCCCCTT CCCCAGCTC CTCCCTGACC CCATGGGCCA GGCCTCAGAC CTTCCAGCTA      120
ACCGCTTCCC ATGAGCCACT ACTCTGATGT CAGCCTATAA CCAAAGGAGC TGGGGGTCC      180
AGGCCTGGTG ACCAACCTTT CTCAGCCCAC TCAATCAGGG TGCTCCCCAC CTGCAGGCAG      240
GAGGCAACAC CCTATCTGCT ACCATCAGCC CTTTCCAGAG CCCATCTGCC CCGCCCAGCC      300
CTGCCCTGCC CAGCCATACC CTGCTCTGCC CCATCTGGGG GTGCCCTGCT CAGGGATGGG      360
CTGGCAGGGC TGTACCCAGC CTCCCTGGTA AGCAAAGAGC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:548:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:548:

```

GCGATTGAAT TCTAGACCTG CCTCCCTGCT TTCTAATAAA TCTGACTAAC CTTAGACATT      60
TTGTATCTTA CTAAGAACAT CCCTCAATA TCTACTTCAT TATCCCATGC CATTCCCCCA      120
CTGTCTCAAC ACGAATCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:549:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 296 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:549:

```
GAATTCGGCC TTCATGGCCT ACTATGGTAT TGCTAAACAA GGGTGGGAGG AGAGAGAGGT      60
AATCAGGGAG GACTTCCAC AGGAGGTGGC ATCTGCAGAT GTCTCAAAAA AGAAAAGAAT      120
TAGCCTGGCA AGAGGTGAGG ATTGTGTAGA GGTCACTCAC TTTCTTGTG GGTGGAGGAA      180
ACCATTCCAG GAGCTGTAGG AAGCTTGGTG CTGGTGAAGG AGGCAGGAGA GGAGAGAAGA      240
GGAGATGACC TTAGAAATCA CATCCAAGAG CCTCTGATCC CAGGAGGCAG CTCGAG      296
```

(2) INFORMATION FOR SEQ ID NO:550:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 254 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:550:

```
GCAGGAGAGA AAATTGAGGC TTAGGTTAAG AAAGTCAAC AATTTAATTG      60
GTTTGGGAAG ACCAGGAAGA CTTTAAGTTC CTAAGATCGT TTGAGATTCT GCATCAGGGA      120
ACACTTGACA GCAGGTTTAT ACAAAGACAG ATTTGGTATC TTTGGAGGGA ATGAGTTTCC      180
AGTCATTGCA GGTGTCCAG CAGAGAGGGC CACTCTCCTT TTTTCTTTC TTTACTCCCT      240
TTTGATTCT CGAG      254
```

(2) INFORMATION FOR SEQ ID NO:551:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 278 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:551:

```
AGGCCATGAA GGCCCTTTCC ATTTCTTTT GTTCCATCAC TCTTCTCTCA ACCTGTGTTT      60
CTTTTTTAC TGAGGAGTTA GTCCCATTA GTTCTTGAT CACATTTTCA TTTGCACGAC      120
ATTACTCGCA GGTGGTGGG AGCCTGGGCT TTTGGGGAAC CAGGCTGCTC TGGTCCCCAG      180
CATTGCCTCC TCCTAGCCCC TCTAGTCCAG TTTGCCTCCC TTACCCTCAT TTTCCAAACC      240
TCTGTACCC TCCTCTCCCT CCCCAGCTG GCCTCGAG      278
```

(2) INFORMATION FOR SEQ ID NO:552:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 322 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:552:

```
GAATTCGGCC TTCATGGCCT ATGCACTTCT TCTTTCTCTC CTCCTTTTGC TGGGTGCTTA    60
CCGAGGCCTG GCAGTCCTAC CTGGCTGTCA TTGGGCGGAT GCGCACCCGC CTCGTTCGCA    120
AGCGCTTCCT CTGCCTGGGC TGGGGTCTGC CTGCCCTGGT GGTGGCCGTC TCTGTTGGCT    180
TTACCCGAAC GAAAGGATAC GGTACATCCA GCTACTGCTG GCTCTCCCTG GAGGGCGGCC    240
TGCTCTACGC CTTGTGGGC CCTGCAGCCG TCATTGTCCT GGTGAACATG CTCATCGGAA    300
TCATCGTCTT CAGCAGCTCG AG                                         322
```

(2) INFORMATION FOR SEQ ID NO:553:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:553:

```
GCCAAAATCA AGCAAAGTAT GAAGAAAGAT AAAGAAGGGG AAGAAAAAGG GAAGCGAAGA    60
GGATTCCCCA GCATCCTGGG ACCCCCACGG AGACCAANCC GTCATGACAA CAGTGCAATT    120
GGCAGAGCCA TGGAAGTACA GAAGGCGCGC CACCCTAAGC ACTTATCCAC ACCCTCATCT    180
GTGAGTCTCT AACCTCAGGA CTCTGCCAAG TTGCGCCAGA GTGGGTAGC AAATGAAGGA    240
ACAGACGCTG GATACCTGCC TGCCAATCC ATGTCTTCTG TAGCTTCAGG GGCCTCTTTT    300
TCCCAGGAAG GAGGGAAGA GAATGATACA GGATCAAANC AAGTTGAGA AACATCAGCA    360
CCTGGAGACA CCTTAGATGT CACCCTCGAG                                         390
```

(2) INFORMATION FOR SEQ ID NO:554:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:554:

```
GACGGCTACA CCATGGGCCG GCTGCTGCGG GCCGCCCGGC TGCCGCCGCT GCTTTCGCCG    60
CTGCTGCTTC TGCTGGTTGG GGGAGCGTTC CTGGGTGCCT GTGTGGCTGG GTCTGATGAG    120
CCTGGCCCAG AGGGCCTCAC CTCCACCTCC CTGCTAGACC TCCTGCTGCC CACTGGCTTG    180
GAGCCACTGG ACTCAGAGGA GCCTAGTGAG ACCATGGGCC TGGGAGCTGG GCTGGGAGCC    240
CCTGGCTCAG GCTTCCCAG CGAAGAGAAT GAAGAGTCTC GGATTCTGCA GCCACCACCA    300
CTCGAG                                         306
```

(2) INFORMATION FOR SEQ ID NO:555:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:555:

```

GAATTCGGCC TTCATGGCCT ACCCTCTCAC GCCACCCCGG CCCCCACCGG GCTGCAGGTG      60
CTGCTGATGC GCTGGGATCT GATTGAGGAT AAAAAGGAAG GAGAGATGAC CCCTACCCCC      120
TCATCCCCCA GTTTTGAAAA GGTCTAAGCA AGTGAGTCTG GTGGAGGAGC TGAGGGAGGG      180
AGCCATGGAA GGTGCCAGAA GGAAGGTTGG CGGGGGCACG TGTGGGCCGT GGCTTGGGCT      240
GGTCAGAGTG GCGTGAGCTG CCCGGCGCCT GCCCTGCCCA AGTGACCAGG GAAGTGTGTG      300
TGTGTCCATG TGTATGCGTG GCTCGAG                                     327

```

(2) INFORMATION FOR SEQ ID NO:556:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:556:

```

GAATTCGGCC TTCATGGCCT AGAGAAGGAG CCAGCTGGGG CCGAATCCAT CCGCTTGAAC      60
ACCAAAGAAG ACAAAAATGG TGTCCCCGAC TTAGTGGGCC TGCTGGCTGT GAGAGACACC      120
CCGGACGAGG AGCCGGTGGA CAGCGACACT TCGGAGAGCG ACTCGCAGGA AAGTGGGGAC      180
CAAGAAACAG AGGAGTTGGA TAATCCTGAG TTCGTGGCCA TTGTGGCCTA TACCGACCCG      240
TCGGACCCCT GGGCCCGGAA GGAGAACTCG AG                                     280

```

(2) INFORMATION FOR SEQ ID NO:557:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:557:

```

GAATTCGGCC TTCATGGCCT ATTTCCGATC TATGTATCTG TACTCATACA GCCTCATCGG      60
GCTAAACAGC CTTCTTTTCA GAACAGTAGA TCACTCAACT GGGTTTTCAT GTGACTGTTT      120
ACCTTTCAAG GCTGGCTTTA TAGGTCTTGC CTCACTGTAT CCAGCAATCC AAACCTTTACC      180
CTATCCCAGT CAGGACTGCA CACCTCATAT TGAAAGACAT ACCTTAGAAC CAGACTCCCC      240
AAACCTTACA AATATCCAC CTTGACTCC CGTTCTCGAG                                     280

```

(2) INFORMATION FOR SEQ ID NO:558:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:558:

```

GCAATGGTCT CCAGGATGGT CTCTACCATG CTATCTGGCC TACTGTTTTG GCTGGCATCT      60

```

```

GGATGGACTC CAGCATTTGC TTACAGCCCC CGGACCCCTG ACCGGGTCTC AGAAGCAGAT      120
ATCCAGAGGC TGCTTCATGG TGTATGGAG CAATTGGGCA TTGCCAGGCC CCGAGTGGAA      180
TATCCAGCTC ACCAGGCCAT GAATCTTGTG GGCCCCAGA GCATTGAAGG TGGAGCTCAT      240
GAAGGACTTC AGCATTGGG TCCTTTTGGC AACATCCCCA ACATCGTGGC AGAGTTGACT      300
GGAGACAACA TTCCTAAGGA CTTTAGTGAG GATCAGGGGT ACCCAGACCC TCCAAATCCC      360
TGTCTGTGTG GAAAAACAGC AGATGATGGA TGTCTAGAAA ACACCCCTGA CACTGCAGAG      420
TTCAGTCGAG AGTTCCAGTT GCACCAGCAT CTCTTGATC CGGAAACACT CGAG          474

```

(2) INFORMATION FOR SEQ ID NO:559:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:559:

```

GAATTCGGCC TTCATGGCCT AATTTTTTTG TTGTTGTTTC CTTTTGTAT TTTACTGATA      60
TCACCAGGAT AGTTTACTCT CCTTCTAGCT TTCTGCTTAC CGCACACTGG ATAACACACA      120
CATACACACC CACAAAATG CTCATGAACC CAATCCGGAG AAGGTTCCAG CAGGTCCCCC      180
ACCTCTCCCT CCTCTCCTA CTTCTCCTCT TGACAGCGAG GACAGGAGGG GGACAAGGGG      240
ACACCTGGGC AGACCCGCCG GCTCTCCCCC CACCCACCC CGTCTCGAG          290

```

(2) INFORMATION FOR SEQ ID NO:560:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:560:

```

GTGTATGTGG GGGGTAAGTG TGTGTGTGTG CGTGTGCGTG TATGTGCACG TGTGTGTGT      60
GTGCGCCTGC ACACGGAGAG CCCACTCATA CGTAGCAGAA AATCAAATGG CCCCAAATCA      120
GAAACATGGC GCATGTGAGC ATGCCACTTC TTGTGTGCCT GTGACTGTTC AGAATGTACA      180
CGGCCCTGCA GCTCCCGAAG GCCAGCTCTG CTGCAACCCC TCCTCTGTCC AACACAGTCC      240
TCACTGGTGT CTTTCTCTCT TCAAATCTAC AGCATTCTG ATCTCTGCAA ACAATTTAAC      300
CCAAAACCAA GTTCTGGCTG ACAAGGCTAC ATCTTGTTTC TTGTGCGTGA TTAGCCTCGA      360
G

```

(2) INFORMATION FOR SEQ ID NO:561:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:561:

```

GTTCTAGACC TGCCTCGAGA TATGCCGGAA GGTGTCATGG CTGGTCCCAG GGCCAGCACA      60

```

```

GGCCCCAGGC CGGGCTGCCT GGTTTTATTT TTATTAACT TTATTTCTG TTTTATGAGT    120
GTGTGTCCGC CCACCCCCAC CCCCTTCAGT GTTAAGTGGG GAGCCCTGGG GGAGTCTCTC    180
CTGCCTCCCA GCCTCTCCA AGACCTCCCC CCTCGTCACC AGCCATCCCT CTGGACCAGG    240
CAGAGGCGG ACCGGGTGGG CAGGGGCCTG AGGGTGGCTC GGGCCAGCCC ACCAGCCAAT    300
GGACCCCTCC TCAGGCCGCC AGTGTGCGCC TGCCCTTTT TAAACAAAA TGCCCTCGTT    360
TGTAACCCT TAACGCTCGA G                                     381

```

(2) INFORMATION FOR SEQ ID NO:562:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:562:

```

GCACTCATAA AAATCTTACT CAGAAATCTT CAGAGGTTTG CTAAGGATAC AATTGATTC    60
TTACACATTT AATGCTCACC AGCTGCTTAG GCCCACACCA TTTATCCACC CTGATTGCT    120
ACTGCTCTTT GAAATACAAC CAGTGTTC A GCCAGACTGT TTTCTGCTT CTGCTCCCT    180
TCTCCTCTC CCAGCACATC TGTGAATTCT TTGACTGGT TACCACTCCC AACTCTCTC    240
CCAGCAATGC AGATCTTCTA CACCCTTTAG GATCTAAGCT AAGTCTGCTT CCCAGATATC    300
CTCCCGAACA GCTCGAG                                     317

```

(2) INFORMATION FOR SEQ ID NO:563:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:563:

```

GAATTCGGGC TTCATGGCCT ACTTTAATGA GATAGGAACT AGTATATTCA CCGTCTATGA    60
GGCCGCCTCA CAGGAAGGCT GGGTGTTCCT CATGTACAGA GCAATTGACA GCTTTCCCG    120
TTGGCGTTCC TACTTCTATT TCATCACTCT CATTTCCTC CTCGCCTGGC TTGTGAAGAA    180
CGTGTTTATT GCTGTATCA TTGAAACATT TGCAGAAATC AGAGTACAGT TTCAACAAAT    240
GTGGGGATCG AGAAGCAGCA CTACCTCAAC AGCCACCACC CAGATGTTTC ATGAAGATGC    300
TGCTGGAGGT TGGCAGCTGG TAGCTGTGGA TGTCAACAAG CCCAGGGAC GCGCCCCAGC    360
CTGCCTCCAG AAAATGATGC GGTATCCGT TTTCCACATG TTCATCCTGA GCATGGTGAC    420
CGTGACGTG ATCGTGGCGG CTAGCAACTA CTACAAAGAA GAAAACCTCG AG          472

```

(2) INFORMATION FOR SEQ ID NO:564:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:564:

```

GCCGCGATGT TCCCCCTTCG GGCCCTGTGG TTGGTCTGGG CGCTTCTAGG AGTGGCCGGA      60
TCATGCCCCG AGCCGTGCGC CTGCGTGGAC AAGTACGCTC ACCAGTTCGC GGACTGCGCT      120
TACAAAGAGT TGCCTGAGGT GCCGGAAGGA CTGCCTGCCA ACGTGACGAC GCTTAGTCTG      180
TCCGCGAACA AGATCACTGT GCTGCGGCGC GGGGCCTTCG CCGACGTCAC ACAGGTCACG      240
TCGCTGTGGC TGGCGCACAA TGAGGTGCGC ACCGTGGAGC CAGGCGCACT GGCCGTGCTG      300
AGTCAGCTCA AGAACCTCGA TCTGAGCCAC AACTTCATAT CCAGCTTTCC GTGGAGCGAC      360
CTGCGCAACC TGAGCGCGCT GCAGCTGCTC AAAATGAACC ACCACCTCGA G              411

```

(2) INFORMATION FOR SEQ ID NO:565:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 270 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:565:

```

CACTCAGAAC CCTCAGACTT TCAAAGAGCC AGGAAATCGG TATAAAATTT TTGAGATAAC      60
ATTAATTAAG CTTTGTGAGC TTTTCTAGG GACCAGATTA AACAGAAGTT TTCCTTTACA      120
GTATTCATTA TGGTTGGTAT CTCCAGAGTT CATCCTTTTT TTGTGGTACT GGGAAAAGTT      180
GCAACATTTA CCTTGCAGG GACATGGATG GAGCTGGAGG CCATTATCTT TAGCAAACCTA      240
ACACAGAGCC AAAGACAAAA ACCACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:566:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 272 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:566:

```

GTTCTGTGTT ACTAACGGCT CATCTTTTCC TTGTTTTTGT TTTTTTTTGT TTCTTTTTTT      60
CCATGTCACT AAAGGCCAAA ACTGGAACCA AGGATTTAAT AACTATTATG ATCAAGGATA      120
TGGAATTTAC AATAGTGCCT ATGGTGGTGA TCAAAACTAT AGTGGCTATG GCGGATATGA      180
TTTACTGGG TATAACTATG GGAACATATG ATATGGACAG GGATATGCAG ACTACAGTGG      240
CCAACAGAGC ACTTATGGCA AGGCATCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:567:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 306 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:567:

```

GCAATGGCAG GAATTCGAAA TATTGGCATA TGGTTCTTTT GGATTAGATT ATATAAAATC      60
AGAAGAGGTA GAACCAAGCC CCAAGCACTC CTTTCTCTCT GCATGATACT TCTGCTTATT      120
GTCTTTCACA CTAGCTACAT GATTTATAGT CTTGCTCCCC AATATGTTAT GTATGGAAGC      180

```

CAAAATTACT TAATAGAGAC TAATATACT TCTGATAATC ATAAAGGCAA TTCAACCCTT	240
TCTGTGCCAA AGAGATGTGA TGCAGAAAGCT CCTGAAGATC AGTGTACTGT TACCCGGACG	300
CTCGAG	306

(2) INFORMATION FOR SEQ ID NO:568:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 253 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:568:

GGTGTTTGGC CACAGTTCGG GACCTATGGT AGAAAAATAC TCAGTAGCTA CCCAGATTGT	60
AATGGGTGGC GTTACTGGCT GGTGTGCAGG ATTTCTGTTC CAGAAAGTTG GAAAACCTGC	120
AGCAACTGCA GTAGGTGGTG GCTTTCTTCT TCCTCAGATT GCTAGTCATA GTGGCTATGT	180
GCAGATTGAC TGGAAGAGAG TTGAAAAAGA TGTAATAAAA GCAAAAAGAC AGATTAAGAA	240
ACGAGCTCTC GAG	253

(2) INFORMATION FOR SEQ ID NO:569:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 544 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:569:

CACAGTGTG GCTCACAACA AGATGCTCAA GGTGTCAGCC GTACTGTGTG TGTGTGCAGC	60
CGCTTGGTGC AGTCAGTCTC TCGCAGCTGC CGCGGCGGTG GCTGCAGCCG GGGGGCGGTC	120
GGACGGCGGT NATTTTCTGG ATGATAAACA ATGGCTCACC ACAATCTCTC AGTATGACAA	180
GGAAGTCGGA CAGTGGAAACA AATTCCGAGA CGATGATTAT TTCCGCACTT GGAGTCCAGG	240
AAAACCCCTC GATCAGGCTT TAGATCCAGC TAAGGATCCA TGCTTAAAGA TGAAATGTAG	300
TCGCCATAAA GTATGCATTG CTCAGATTG TCAGACTGCA GTCTGCATTA GTCACCGGAG	360
GCTTACACAC AGGATGAAAG AAGCAGGAGT AGACCATAGG CAGTGGAGGG GTCCCATATT	420
ATCCACCTGC AAGCAGTGCC CAGTGGTCTA TCCAGCCCCT GTTTGTGGTT CAGATGGTCA	480
TACCTACTCT TTTCAGTGCA AACTAGAATA TCAGGCATGT GTCTTAGGAA AACAGAATCT	540
CGAG	544

(2) INFORMATION FOR SEQ ID NO:570:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 330 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:570:

GAATTCGGCC TCATGGCCTA CATTAAAGAA AAGCTTCCCA CACATCCATT TGAAGCTGAT	60
CTCCTTGAGA TGGCAGAAAT GATTGCAGAA GATGAAGAGA AGAAGACTCT ATCTCAGGGA	120

```

GAGTCCCAAA CTTCTGAACA CGAACTCTTT CTAGACACCA AGATATTTGA AAAAGACCAA      180
GGAAGTACAT ACAGTGGTGA TCTTGAATCA GAGGCAGTAT CTACTCCACA TAGCTGGGAG      240
GAAGAGCTGA ATCACTATGC CTTAAAGTCA AATGCTGTGC AAGAGGCTGA TTCAGAATTG      300
AAGCAGTTCT CAAAAGGGGA AACCCCTCGAG                                     330

```

(2) INFORMATION FOR SEQ ID NO:571:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 312 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:571:

```

GAATTCGGCC TTCATGGCCT AAGGGAAAAC ATTTGTCATG TGTAAGCTT CATGAAGTTC      60
TCTTTAAAAA ATACCAAAGC TTGTTTATTT CTGATAATTA ACCTAAGCCC TTATGAAAAAT      120
AAACAAAATG AAGGGATTAT GACAGGTATT ACCAAAAACA CAAAAGGAA CAAAGGGGCC      180
TGCGTTAAAA CCTAATTGCT AATGCTTCAC AACTAGGAGA GCATGCCGTC TTGATGTTTA      240
AAAAACCCAG GGTCTCCACC CTTCTTTTGA TTTGTGCAAT TCTGTCTTCC ACAGTCCGG      300
AGCTTACTCG AG                                     312

```

(2) INFORMATION FOR SEQ ID NO:572:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 391 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:572:

```

GAAAATGTTT ATGGCCGCG CAGGAGTAGA GGTCTGAGC CTCCTATTTT TCTGCATCTA      60
CTGGGGTCAA TATGCCACCG ATGGCATTGG CAACGAGAGT GTGAAGATCT TGGCCAAAGCT      120
GCTCTTCTCC TCCAGCTTCC TCATCTTCTT GCTGATGCTT ATCCTCCTGG GGAAGGGATT      180
CACGGTGACA CGGGGCCGCA TCAGCCACGC GGGCTCCGTG AAGTTGTCTG TCTACATGAC      240
CCTGTACACG CTCACCCATG TGGTGCTGCT CATCTACGAG GCGGAATTCT TTGACCCAGG      300
CCAGGTACTG TACACGTATG AGTCGCCGGC CGGCTACGGG CTCATTGGAC TGCAGGTGGC      360
GGCCTACGTG TGGTTCTGCT ATGCTCTCGA G                                     391

```

(2) INFORMATION FOR SEQ ID NO:573:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 377 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:573:

```

GAATTCGGCT TCATGGCCTA AAAAAAATC CAGAAAAAAA CAACAGCGCG GTGGTGGGGT      60
TTTGTAAATT TCGCCTTTT TTTTCTTTCG ACGCGCCACG AAATTCAGGC TCGCTTTAGC      120
TCCTGAGAAA TATCCAAAGT AATTGCAGAT TGCGGAGACG CACAGCATTA GTTCAAAAAA      180

```

GACCCGAGGC ATTGGGGCAG GGTTAGGTGG AGGGCACCGG AGGCTCTACA CAAGAAAAGC	240
AGGAACCTGC AAACCCACGT AGATTTCAC TACAACCTTC CCTTTCTTC TGGCTAGCCA	300
TCCAGCGCTC TCCATGGCAC TGCATGGCAC AAGTTGCTTC TGATAGTCTT TTAAGTTTGC	360
TAAGGGAACCT CCTCGAG	377

(2) INFORMATION FOR SEQ ID NO:574:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:574:

GAATTCGGCC TTCATGGCCT ACAGCCTCAA GTCACCTCCA AGCCCCCTCC TTGTCTGTGC	60
ATCCGGGGGC AGCTCTGGAG GGGGTTTGCT GGGGAACTGG CGCCATCGCC GGGACTCCAG	120
AACCGCAGAA GCCTCCCCAG CTCACCCCTG GAGGACGGCC GGCTCTCTAT AGCACCAGGG	180
CTCAGGTGGG AACCCCCCTC CCACCCCTCG GAGTCTGTTT CCAAGGAGGA GAAGGAGCAG	240
AACTATGACT TAACTGAAGT CTCAGAGAGC ATGAAAGCTT TCATATCCAA AGTCTCAACC	300
CACAAGGGAG CAGAGCTGCC TCGAG	325

(2) INFORMATION FOR SEQ ID NO:575:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:575:

GAATTCGGCC TTCATGGCCT ACTCAGCCTC CCTAATAGCT GGGATTACAA GCGTGAGCCA	60
CCACACCCCG CTGGGAAATA TCTTAAAGA ATCAAATAA GAAAGTTACT CTACTTAAAT	120
CGTGTGCTTT TTCTGTGTGT GATTTATGGT AATCTTACCA TGGGGTATCT GATTACTTTA	180
GAAAGATCCA TTTAGCTTAT TTTTCTTTC TTGGGTTAT TTTTCTTTC CTTCATTTC	240
CACAGCCTCC CCCCAAATAA AAAATAAAGA TATAAAGTCT ATCTTCTCCC TCTTGTGAGT	300
TTAAGTAAAA AGAACTTTTG CTTCATTTT AATAATAGAA TTTGTGTGTA TATAATATAG	360
GCAGTGATT GGCCTCAAGC TGAGTTTGA TTTGAAAAGA TGAGAATATT AAAGCTTGTC	420
AGCCAGCCCA CTCTCGAG	438

(2) INFORMATION FOR SEQ ID NO:576:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:576:

GAATTCGGCC TTCATGGCCT ACTGNTTCC ATAAAGGCTG TACTAATTC CATTCTCACC	60
AACAGTTCAC TAGGGTTCCC TTTTCTCCAC ATTGTTGCCA ACATTCTTTA TCTTGTGTTT	120

```

NTTAATAACA GCTATCCTAA CAGGTATGAG GTGATCTCTC TCATTGCGGT TTTGATTTGC      180
ATTTCCCTAA CGTTTGGTGA TACTGAGCAT TTTTGCATAC ACCGGGTCAT TTGTCTTTG      240
TTGTTGACTT GAGTCCCTTA TATAGTTTGG ATACTGCTGT GGCCTGAATG TTTGTGTCCC      300
CCAAAAATTC GTATATTGAA CTCTCATCCC TAAGGTCAAC AGTTTAGGGA AGCGATTAGG      360
TCCTGAGGAC TCTGCCCTCT TGCATAGAAT TAGTGCTCTT ATAAAAGATG CCCGAGGGAG      420
CTCTTTTGCC CCTCCTGCCA TGTGAGGACA CAGCTAGAAG CTACCATCTG TGAACCAGGA      480
AGCCCCCTC ACCAGACACT GTATCTCGAG      510

```

(2) INFORMATION FOR SEQ ID NO:577:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:577:

```

GAATTCGGCC TTCATGGCCT AAAAAATAAA AATAAAATAT ACAACCAAAG GCAGTATTCA      60
CAGAGGTATT TCTTGGGAAT AAAAGAAGGA ATATAGTCAT TCCTTGGTAT TCTCTTTGGT      120
GTCCAGAGTT ACTTAAAAAT TCTTGGTGTT TATTGCCTTT TAGTCACAGG GATACACCTT      180
TTATTCATTT ATTTATTTAT TTACCAGTCT CATTAGCAG TAGGAATGCA TCTTAGCATT      240
TTTATACTGC TGCTCAACAC AGTGCTTTCA CTCGAG      276

```

(2) INFORMATION FOR SEQ ID NO:578:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 262 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:578:

```

GAATTCGGCC TTCATGGCCT AAATCCTTCC AGATGTCCTG TGAAATGTT TGAATGCTAC      60
TTGTCTAAAA GTCCACAGAA TCTTAATCAG AGGATGGATG TTTTATTATT GCAACCAGAA      120
TGCTCTAGTT CTACAGATAG CCCTGTCTGG TATACGTCTA CTTCACTGGA CCGAAACACC      180
TTGGAAAATA TGCTTGACG GGTTCTTCTA GTAAAAGATA TTTATGATAA AGACAATTAT      240
GAACTGGAGG AAGACACTCG AG      262

```

(2) INFORMATION FOR SEQ ID NO:579:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 439 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:579:

```

GAATTCGGCC TTCATGGCCT AATTTAGGAC CATTTAAGAG AGTTTGACTA AGAAAGAGCT      60
GTTTGAAACC TCCTGGCTTA TGTATTTTAA GGGGTGTGGT GATCGAGGCT TTCTCCTCTG      120
AGTAGAGTTT GTGCATTTGC AGTATAAGAT TATCATTATC AAACATTCCT ACTAGGCCTT      180

```


TCTCCTCAGC	CCCTAAAAAA	ATATGTATAG	TAATGAAGTA	GGAAGATCAT	GTTTATATTT	240
GACTTCACAA	ATTCCTCAGG	CTAAGTTGCT	TTCTACTGGG	GTGTGGCTGG	AGACAAAAAT	300
TACAGGTAAG	ACTTGACTTA	ATTTTGTATA	GGGAGGTTCT	TAAGAGGCTT	TTTCGGAATC	360
ACTCACCTCG	CCCACTTCCA	TGCAGGGATG	TGGTGAGAGC	CCTTCAGTCT	ACTTAGGAAA	420
ACCTGGCACA	TGACTCGAG					439

(2) INFORMATION FOR SEQ ID NO:580:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 346 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:580:

GAATTCGGCC	TTCATGGCCT	AGATATTCTC	AGGGTCATCA	AGACTCCTGA	GATAGCAAAC	60
TTGGCCTTGC	TTGGCTTTGG	AGATATCTTT	GCCCTGCTGT	TTGACAACCG	CTACCTGTAC	120
ATCATGGAAT	TGCGGACAGA	GAGCCTGATT	AGTCGCTGGC	CTCTGCCAGA	GTACAGGAAA	180
TCAAAGAGAG	GCTCAAGCTT	CCTGGCAGGC	GAAGCATCCT	GGCTGAATGG	ACTGGATGGG	240
CACAATGACA	CGGGCTTGGT	CTTTGCCACC	AGCATGCCTG	ACCACAGTAT	TCACCTGGTG	300
TTGTGGAAGG	AGCACGGCTG	ACACCATGAG	CCACCAGCCG	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:581:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 740 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:581:

GAATTCGGCC	TTCATGGCCT	AGACCTGCCT	CGAGATTGCC	ATCTTGGTTT	TGGTGGGTTT	60
CGGCCGACTT	CTTTGCCACT	TGCTATTTTA	TTTTCTAGGT	CTTTGTGCCC	CGTATTGTGT	120
GCTGAACTCC	NGTCTCATCC	TGTGACTAAG	ATTGCCTAAC	CTCCTGGGAA	TGCAGCCCAG	180
TAGATCTCAG	CCTTACTTTA	CCTAACCCCT	TTTCAAGATG	GAGTCACTCT	GGTTCAAACA	240
CCTCTGACAT	TCGCAGTGGA	ATCCATTAAA	AGATGTTAAG	GAGATATGAT	TATATTTCTA	300
AATTGTCACT	CCAGCATCCC	CTACGCCAGA	CATTATGCCA	GTCTCTATCC	ATACAGTATC	360
TCATTTAATC	CTCCCGTCAT	TAATCTCATT	TTACCAATGA	GTAAACTTGA	AGCAAATGAG	420
TGACTTTCTC	AAGGCTACCT	ACTTACGCCT	TACCAGGGCC	AGGATTCAAA	CCTAGACTTG	480
TTCAGCGACA	GAACACACAC	TTAACCATCA	CCCACTTAGG	CCATGAAGGC	CGGCCTTCAT	540
GGCCTAAACT	GCTGTTATTT	TGGATTATAT	GGAGTTATGA	AAATCTAAAT	GTTTTACAAA	600
GTAAAAAAGT	ATTCTTTTTT	TGCTCACTTA	TAACTCAAAA	ATCACTAAAG	TCATTCTGCT	660
AAACATGCCA	CGAAGCCAAG	CTTCTTGCCA	TATGTCTGCA	TAATTTTATT	AAATCACTGC	720
TATTGACGTG	CAACCTCGAG					740

(2) INFORMATION FOR SEQ ID NO:582:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 491 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:582:

```

GAATTCGGCT TTCATGGCCT ACAAAGGGGT AGCAAGGCAT GTCTTACATG GTGGCAGCAG      60
AGAGAGAGAG CAGGGAAAAC TGTCATTTAT AAAACCATCA GATCAGTTGG GTTGTGCAAA      120
TGGTGGAGAA GAAAACTTCA GGAAGAGTGC ATAGACTGAG CAGAGAAGAG GACCAGCTAC      180
CTCCGTAGAG GCAGGGAGAG CAGCCAAGCT GGAGCCTGAG CAGCATTGCT GGACATGGAG      240
AAGGTCTGGA ATCTTGTCAG GGAAGCAAGC AAAGGGTTTC TTTCTATTCA ATGAAGTCCA      300
CTCCCAGGAC CCTGGGCAGC AACGGGTGCT GGACTGGGCC ACCTGGCAGC GTCACATCAA      360
TTGGCAGCTA GAAGTCCTGG AGAATGACAA CTTCCAGGAC GACCCCCATG TGGGACTCCC      420
TCAGCTCAGC AAGAGACTGC CACAGTTCGA TGATGATGCA GACACCAGAC AGTAAAAGAA      480
GAAAACTCGA G                                     491

```

(2) INFORMATION FOR SEQ ID NO:583:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 566 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:583:

```

GAATTCGGCC AAAGAGGCCT AAACAGTCCA GAGAGGCATA AATCAGACCC AGTTCCTAGC      60
TGGCTTGTC TTTATCAAGTA AATGGAAAAG GGGCCAGGCC AAAGCAGGGC AAGATGACCT      120
TGGACTTGGG AGAGACTTGG ACTCATGCCA CAATCCTAGG GTGCCCCTG GACCATTGCT      180
TTTCTGAGTT TTGTAGTCAT TCGGTGTCTG AAGTAAGGTA GATTGAAGTG AGGCCTTCGG      240
TTTCCATCTG GACCCTTTCT CTCCTGTTTT CTTTTTTTCC GCCTTGTCCT AGGGATGTTC      300
AATAGCCCAG AAATGCAAGC CCTCCTCCAG CAGATCTCTG AGAACCCCCA GCTGATGCAG      360
AATGTGATCT CAGCACCTTA CATGCGCAGC ATGATGCAGA CGCTTGCCCA GAACCCCGAC      420
TTTGCTGCTC AGATGATGGT GAATGTGCCG CTCTTCGCGG GGAACCCCCA ACTGCAGGAG      480
CAGATCCGCC TGCAGCTCCC AGTCTTCCTG CAGCAGATGC AGAACCACAG GTCACTCTCC      540
ATCCTTACCA ATCCCACATC CTCGAG                                     566

```

(2) INFORMATION FOR SEQ ID NO:584:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:584:

```

GAATTCGGCC TTCATGGCCT AGTTGAAAAT GATCATTACA CAATATATTC CTAAACATAA      60
ACTGAGTAAA CTTGAAACAG CTCACTGTGT GGAGAGGACC ATTCCCGTTT TGCTCACCAG      120
AACTGGAGAT TCTTCTGCCC GCCTCCGCGT CACAGCTGCA AATTTTATTC AGGAAATGGC      180
CTTGTTTAAA GAAGTTAAGT CTCTCCAAAT TATTCCATCC TACCTGGTGC AGCCATTGAA      240
AGCAAACCTT TCAGTTCACC TGGCAATGAG TCAGATGGGC CTCCTGGCCC GGCTGCTGAA      300
AGACCTGGGC ACTGGCAGCT CGGGCTTCAC CATTGACAAC GTGATGAAGT TTTCAGTGAG      360
TGCCCTGGAG CATAGAGTGT ATGAGGTCCG CGAGACGGCG GTTCGAATTA TTTTGGACAT      420
GTACAGACAG CACCAGGCTT CCATCCTGGA GTACCTTCCT CCAGACGACA GCTAATCTCG      480
AG                                     482

```

(2) INFORMATION FOR SEQ ID NO:585:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:585:

```

GAATTCGGCC AAAGAGGCCT AATAAGGTG TGGAACTTC ATTCAATCAT ATCTCAACA      60
CAAATTGTAG GTAGCCTGTT TTTTAAACA TTTATTCAAC AAATATTTAG TCCAAGCCAC      120
TATTACTTAC TACCTTCTCT ACTATTGTAT GGACTTTTAA CTATCTCTGA CACTATTAC      180
TATTCTTCCA CATTCTCTAT TATTTATACC TATGGTAAAA TTTGCCAGTT TGACCATACA      240
ACTAATACTC ACAGGGACAC TCGAG                                         265

```

(2) INFORMATION FOR SEQ ID NO:586:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:586:

```

GAATTCGGCC AAAGAGGCCT ACTCGAGTTT GGTGCTTTAT TTAGCAAGTG AGTAAAAATA      60
TTGGAATATT TAAGTATTG CATAAAAAAT CAAATGGTAG TGTTTTGTA TCTCTACTGT      120

```

(2) INFORMATION FOR SEQ ID NO:587:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 503 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:587:

```

GAATTCGGCC AAAGAGGCCT ACTCGAGTCA GGTCTAGAAT TCAATCGACG GTTTAGGAAA      60
AAGACAATTT AAGAGAAGAA CTAAGAAAA GAACAGAAAC TGAGAAGCAG CATATGAACA      120
CAATTAAACA GTTAGAATCA AGAATAGAAG AACTTAATAA AGAAGTTAAA GCTTCCAGAG      180
ATCAACTAAT AGCTCAAGAC GTTACAGCTA AAAATGCAGT TCAGCAGTTA CACAAAGAGA      240
TGGCCCAACG GATGGAACAG GCCAACAAGA AATGTGAAGA GGCACGCCAA GAAAAAGAAG      300
CAATGGTAAT GAAATATGTA AGAGGTGAGA AGGAATCTTT AGATCTTCGA AAGGAAAAAG      360
AGACACTTGA GAAAAAACTT AGAGATGCAA ATAAGGAACT TGAGAAAAAC ACTAACAAAA      420
TTAAGCAGCT TTCTCAGGAG AAAGGACGGT TGCACCAGCT GTATGAACT AAGGAAGGCG      480
AAACGACTAG ACTCACTCTC GAG                                         503

```

(2) INFORMATION FOR SEQ ID NO:588:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 567 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:588:

```
GCCACTATGG TACCAAAACC TCAGTCTTCA CATAGTCAAA CTTGGACACA AACAGCACCT    60
CCCACAAACA TTCTTATCCT CATCCCAGCA TTGGTTACTG ACCACACACT CTAGCAGGTC    120
ACTCAAGCGC TAATGCTGGG AAGGACCTCT GAATACTTCT CTTTGTCTTG TGCCACACAG    180
CCAGGGTCAC CAAAGCCTGT TAATGCTACC TCCAAAAAAG GCAAATCTGA CCCCTCTTCC    240
TCAAAACCCA GCCACATAGT AAGTTCAAGG ATTCAGTCAC AGGTCTGCCT TAGTGCACTA    300
GCCCTATAAC AGTAACTAT TCACTTCCCC TCCAGTCCCT TGCCCCCTTT CAAGCAATTT    360
CCTGTACTGC CAAGGGAATT ACTTTTCTAA AATTAGCTAA GAAACTTTTG ATGGTATCTT    420
ACTGTCCCAA AAATAAATTT TAATTCCTTC TTTAGCATGG TATAAAAAGG ACACAACAGA    480
GTTTGGTCTA GTGTCCTTTT AAAGACACTA GATTTCAT CACCATACCG CATGTACCCT    540
ATACGACTTA TCAATTCCTT ACTCGAG                                567
```

(2) INFORMATION FOR SEQ ID NO:589:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:589:

```
GAATTCGGCC AAAGAGGCCT AGGCATGGTG AGTTTIGATC TTCTTCCCCT TCTTTTCTTC    60
CCCTTCTTCT TTCCTTCTTT GATCTTCTTC CCCTTCTTTT CTTCCCCTTC CCCTTCTTTT    120
CAATTTCTCC CACGTCAA                                138
```

(2) INFORMATION FOR SEQ ID NO:590:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:590:

```
GAATTCGGCC AAAGAGGCCT AGAGAGAATG GAAAAGATAA GGAACAGAAA CAAACAAATA    60
CCGATAAAGA AAAAAATAAA AGAGAAAGGG AGCTTCTCTG ACACAGGCTT GGGTGATGGA    120
AAAATGAAAT CTGATTCTTT TGCTCCCAAA ACTGATTCTG AGAAGCCTTT TCGGGGCAGT    180
CAGTCTCCCA AAAGGTATAA GCTCCGAGAT GACTTTGAGA AGAAGATGGC TGACTTCCAC    240
AAGGAGGAGA TGGATGATCA AGATAAGGAC AAAGCTAAGG GAAGAAAGGA ATCTGAGTTT    300
GATGATGAAC CCAAATTAT GTCTAAAGTC ATAGGTGCAA ACAAAAACCA GGAGGAGGAG    360
AAGTCAGGCA AATGGGAGGG CCTGGTATAT GCACCTCCAG GAAAGGAAAA ACCGAGGCAG    420
```

(2) INFORMATION FOR SEQ ID NO:591:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:591:

```

GAATTCGGCC AAAGAGGCCT ACATTGCTTT TCAAATAACT TAAAATAACA CGTTATGTGC      60
CATGTGGCTA CTTTAGTAAT ATTGCCAAGA AGAGCACAGT TTTTACACTA GTGGCATCTC      120
AGTGAAATTA ACCAAAGATG AAGCTTTGGC TTGCTGGTG AGATCAGAGC CCTCCTGAGC      180
AGGCAGCGCC ACTCCAGGGT TCAGACAGGG CTGCACAGGC GGCAGAGATA CAGGGTCTGA      240
GGGCTGAGAC GCCATGGGGC CGCTGCTGCT TATGTGGTTG GATTGTTTAC AAGCCTCATT      300
ATTAAACTG AAGGCATTTT TTTTCTCTG CTGCCTTTCC CAAAGTGTT AGGTTTGGAA      360
AAGAGATGAT GATGTAATA TTTATTTGTG CTTTTTAAGC CATTTCCCCA AATGGGACTA      420
GCATGCTTGT TTTCAGTATA CCGTGGCCTG CCTCATGATG GTTGGAGAT ACTGTCTGTG      480
GATGTGAGGT GGGGACTTCA TTCATTGTCC TATTTCTATC TNCACTTGT GCCTGGAGAG      540
CTTTCAGGGG AGGTGGAGGA GGAGGCTCTG CCAAGCTACT GCAACATCTG TCACCCACTA      600
NACCCAGACC T

```

(2) INFORMATION FOR SEQ ID NO:592:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:592:

```

GAATTCGGCC AAAGAGGCCT AATTGAATTC TAGACCTGCC TGAAACCTGT CCCTCCTAGG      60
AAATTGAATA GCTTGAGTTA CGAAGGAACT GCATGGGACA GACTGAGTTT TGTTCTCTC      120
TTCCCTGGAA GCTGGATGTC CTTTACAGCT TTGCCAGTA TGTCAATGTT CCCCTGAAGT      180
ACATAATCCA GAGTGGACTG CTTTTCAGGG TCCTTCAGCT GTGAAAGTGG AGCATTTCATA      240
TCAAGACTAC ATCTTTCCTG TTCAGCTTTC TTCAGCCTTG GAGGAACCAC ACACAATGGA      300
TCCAAGACTT CTGTCCCTTG CTAATTATCT ATAAGAAGTA AACCCATTTC ACATAACTTG      360
TGAATATGTT TTCTTTCACT GGATTTTGGC AAATAGGTAC CCAGTGCATG GTGGACCTAC      420
ACAGTTAGGC CTCTTGGCC GAA

```

(2) INFORMATION FOR SEQ ID NO:593:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:593:

```

GAATTCGGCC AAAGAGGCCT AAAAGCATTC AGTATTGGTA AAATGAGTAC AGCTAANCGA      60
ACTTTAAGTN AAAAGGAGCA GGAAGAATTA AAGAAAAAGG AGGATGAAAA GGCAGCTGCT      120
GAGATTTATG AGGAGTTTCT TGCTGCTTTT GAAGGAAGTG ATGGTAATAA AGTGAAAACA      180
TTTGTGCGAG GGGGTGTTGT TAATGCAGCT AAAGAAGAAC ATGAAACAGA TGAAAAAGA      240
GGTAAATCT ATAAGCCATC TTCAAGATT GCAGATCAAA AAAATCCTCC AAATCAGTCT      300
TCCAATGAAA GACCACCATC TCTTCTGTG ATAGAAACCA AAAAACCTCC ACTTAAAAAA      360
GGAGAGAAAG AAAAGAAAAA AAGCAATTG GAACCTTCA AAGAAGAATT AAAGCAAATT      420
CAAGAGGAAC GTCGACTCGA G

```

(2) INFORMATION FOR SEQ ID NO:594:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:594:

```

GAATTCGGCC AAAGAGGCCT AAGAAAACCT AGCTAATAAA GAAAAAGCTG TTGCTCAAAT      60
GAAGATAATG ATCTCAGAGT GTGAATCATC TGTGAACCAG CTGAAAGAAA CATTGGTTAA      120
TCGAGATCGT GAGATAAACA GCCTCCGGCG CCAGCTTGAT GCAGCTCACA AAGAACTCGA      180
TGAAGTAGGA AGATCTAGAG AAATCGCTTT TAAGGAAAAC AGAAGACTGC AAGATGACCT      240
GGCTACAATG GCAAGAGAAA ATCAAGAAAT CTCATTGGAA TTGGAAGCAG CAGTGCAAGA      300
AAAAGAAGAA ATGAAGAGCA GAGTTCATAA ATACATAACA GAGGTGTCAC GATGGGAGAG      360
CTTAATGGCT GCCAAGGAAA AAGAAATCA AGATTGTGTA GATAGATTTC AGATGCTTCA      420
TAACCGTGCT GAAGACTGGG AGGTCAAAGC CCATCAAGCT GAGGGAGAAA GCAGCTCACT      480
TCGACTGGAA CTTCTTTCTA TTGACACTGA GAGGAGACAT CTTCGGGAAA GAGTGGAGCT      540
ATTAGAAAAA GAAATCTCG AG                                     562

```

(2) INFORMATION FOR SEQ ID NO:595:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:595:

```

GGAAGAGCAG AATTTGGTGG CTTATCCTCA TGATGGAAAA ATCTTTTTCT GCACCTCACA      60
AGATATCCCT CCTGAAATG AACTGCTTTT TTATTATAGC CGAGATTATG CTCAACAGAT      120
TGGTGTTCCCT GAACACCCAG ATGTGCATCT CTGTAAGTGT GGCAAGGAGT GCATTCTTA      180
CACAGAGTTC AAAGCCCATC TGACCAAGCA CATCCATAAC CATCTTCCTA CCCAGGGACA      240
TAGCGGCAGC CATGGGCCAA GTCACAGCAA AGAAAGGAAG TGGAAGTGCT CAATGTGCCC      300
CCAAGCTTTT ATCTCTCCTT CCAAACCTCA TGTCCACTTT ATGGGTCACA TGGGTATGAA      360
GCCCCACAAG TGTGATTCTT GTAGCAAGGC TTTTAGTGAT CCCAGCAACC TGCGAACCCA      420
CTCGAG                                     426

```

(2) INFORMATION FOR SEQ ID NO:596:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:596:

```

GAAAAATCAG TCGACTGAAT GACACCATCA AATCTTTGAA ACAACAGAAG AAACAAGTGG      60
AACATCAGCT GGAAGAAGAA AAGAAAGCAA ACAATGAGAA ACAGAAAGCT GAAAGGGAGC      120
TAGAGGGTCA AATCCAGAGA TTGAACACAG AGAAAAAGAA ACTAAATACG GACCTGTATC      180

```

ACATGAAACA TTCTCTCAGA TACTTTGAAG AAGAGTCCAA GGATCTGGCC GGCCGCCTGC	240
AACGTTTCATC GCAGCGTATA GGAGAGTTAG AGTGGTCTCT CTGTGCTGTC GCCGCCACAC	300
AGAAGAAGAA GCCGGATGGG TTCTCGAG	328

(2) INFORMATION FOR SEQ ID NO:597:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 529 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:597:

GAGAAGTGCAG AGAGGGGCCA GTGTTGTTGT TACCTGAAAG GTAAGTGCAG CCCACAAAAA	60
TGCAGTGAAG AAGAAGATAT ATGCATATGT TTAAGTTAAT ACAATTGAGA TACATTAGC	120
AGACAGAATC AATAGAGTTG ATGAGTGAAT GACTGGATGT GTGGGGAGTT TATATCACTC	180
CCAGGTTTTT GACTTGGGCC ACCGGGCACT CAAGAAGGAA AAAGAGGATC CAGGGAGAGG	240
AACTTTTCTG AGGACTGGGG TAGGGCTGAA CAGCTGCATT CGAGACTGGT GGAGGGTGGG	300
CTGGGCATGG GATGCACAAA TGGAAATTC ACTGGGTCTG CAGCTCACAC ATAGGCATGA	360
CCAGCATAGA GATAGAGAGG CCCCAGTGCT GCTGAGTAAC TGTGATTCCC CAGGTGATGG	420
CATCAGCTGA GAAGGGAAGG AAGCCCATGT GAGGACACTG AAGAAGGAGT GAGCAGACAA	480
TAAGAAGCCC ACAGAAGACA GAGAAGGAAC AACTAGAAGG AGGCTCGAG	529

(2) INFORMATION FOR SEQ ID NO:598:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 454 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:598:

GAAAAAGATG AAATCTGATG GATTAGGAGC ATCTGGACAT TCGTCAAGTA CCAATAGAAA	60
TAGTATAAAT AAAACTCTGA AGCAAGATGA TGTAAGGAA AAAGATGGTA CAAAAATAGC	120
ATCTAAGATT ACAAAGAAG TTAATACTGG GGGAAAAAAT GTTCTGGAA AGCCCAAAAC	180
TGTAACAAAA TCCAAACAG AAAATGGTGA TAAGGCACGG TTGAAAAACA TGTCACCTAG	240
ACAAGTTGTA GAAAGATCAG CAACAGCAGC AGCAGCAGCA ACTGGACAGA AGAATTTACT	300
AAATGGAAAA GGAGTGAGAA ATCAGGAAGG GCAAAATTCA GGTGCCAGAC CCAAGGTACT	360
CACAGGAAAC TTAAATGTGC AAGCCAAAGC AAAGCCTTTG AAGAAAGCTA CAGGGAAGGA	420
TTCACCATGC CTCAGCATCG CAGAACCCT CGAG	454

(2) INFORMATION FOR SEQ ID NO:599:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 411 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:599:

```

GAATTCGGCC TTCATGGCCT AGGTCCTCAA GCATTGCTTC AATATCAATA TCGTCTGCCA      60
TTTTCTCTAA ACGCCTGTTC CGGCCTTCGG GCGCCTGTGG TGCTCGTGTT CGGGAAGAGA      120
TTGCTGCTGC TGCTGCTGCT GCTGCCGCGG CCGCCGCTTC TGTGCTACT GTTAAGCCCC      180
TAGGCCCAGG CCGCGGAACC GCCAGCCCG AATATCGGT TCCAAGGACG GCTAGGCCCG      240
AGAGAATCTA AAAAAACAA TGAATTAGA GAAGCCACG CGGGAGAGCA GGACGGCGGC      300
TTCGGCAGCT CAGGATCCAC CCCNGCGACA GCGTCGACAA GTTCCCTGAA ATGGCGGCCG      360
CTGCTTCCCT GTACTCANAN TCCACCCCC GAATTCTAGA CCTGCCTCGA G              411

```

(2) INFORMATION FOR SEQ ID NO:600:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 306 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:600:

```

GAATTCGGCC TTCATGGCCT AATTAAGCCT GCCTACTTCT ACAATGCATT CTGTTACCTA      60
TTGAACAGT ATGTTTGTAA CTATGGCAAT GAAGTCAGTA GATAGGAAAC CAGTTATTCC      120
TTCTACCTTT AAAAATTTTG AGAACTTGCC AACCAGGGAC TAAAGCTATT ATCTGAACA      180
GAGTCCCTAA AGCTAGTCTA GTTTTGGCCA CATCTGCAAT GATTATTGTT TAATTTCAAA      240
AGAATCCTCA GGCTCTACAA TCTAGGGGTG GTAAATGTGT TTCCACTATA CTTGGGACCG      300
CTCGAG                                     306

```

(2) INFORMATION FOR SEQ ID NO:601:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 443 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:601:

```

GAATTCGGCC TTCATGGCCT AGGAATCTCC TCTTAAACCA GGTGAAGTGG GAAAGCAGGG      60
ACCATACCAC CCTGAGTGAC ATCTACCTGA ATAATATCAT TCCTCGATTT GTACAAGTCA      120
GCGAGGACTC AGGAAGACTC TTTAAAAAGA GTAAAGAAGT CCGCCAGCAG CTCCAAGATG      180
ATTGATGAA GGTCTGAAC GAGCTCTACT CGGTATGAA GACATATCAC ATGTACAATG      240
CCGACAGCAT CAGTGCTCAG AGCAAACTAA AGGAGGCGGA GAAGCAGGAG GAGAAGCAAA      300
TTGGTAAATC GGTAAAGCAG GAGGACCGGC AGACCCCATG CTCCCCTGAC TCCACGGCCA      360
ACGTTTCGCAT TGAGGAGAAA CATGTCCGGA GGAGCTCAGT GAAGAAGATT GAGAAGATGA      420
AGGAGAAGCA CCAAGCCCTC GAG                                     443

```

(2) INFORMATION FOR SEQ ID NO:602:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 585 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:602:


```

GAATTCGGCT TCATGGCCTA CAACATGTCA GTTTTTTTTT TCATTTTCTT CAATATTTTT    60
CTTCTNGCTT TCTCTTCTCC TGGTTCCAG CCTCTACTCA ATAGTCCCCC CAGCTTTGTG    120
TGCTGGTCTC GGGGCTTCAT GGAGATGAAT GGGCGGGGGG AGTTGGTGGA GTCACCTCAAG    180
AGATTCTGTG CTTCCACGAG GCTTCCCCC ACTCCTCTGC TGCTATTCCC TGAGGAAGAG    240
GCCACCAATG GCCGGGAGGG GCTCCTGCGC TTCAGTTCCT GGCCATTTC TATCCAAGAT    300
GTGGTACAAC CTCTTACCCT GCAAGTTCAG AGACCCCTGG TCTCTGTGAC GGTGTGAGAT    360
GCCTCCTGGG TCTCAGAACT GCTGTGGTCA CTTTTCGTCC CTTTCACGGT GTATCAAGTA    420
AGGTGGCTTC GTCCTGTTCA TCGCCAATA GGGGAAGCGA ATGAGGAGTT TGCACCTCCG    480
GTACAACAGC TGGTGGCCAA GGAATTGGGC CAGACAGGGA CACGGCTCAC TCCAGCTGAC    540
AAAGCAGAGC ACATGAAGCG ACAAAGACAC CCCACACATC TCGAG                      585

```

(2) INFORMATION FOR SEQ ID NO:603:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:603:

```

GAATTCGGCC TTCATGGCCT AGTCTGGTAG TAAGGTGGAG TGGGTTTGGG GCTAGGTTTA    60
GCTCGGGGGA GGTGGTGTG GGGGCCGAG GCTGCGCGGT GCCTGGGTAC ATCTCCAGGC    120
CCACGCCCCG GGCTTGGGAA GTCACATCCA TGTCTCTGCG CCGTGCAGCT TTCAAGATTT    180
GCCGAAAGGC TCCAGAGCT CTGTTTTAAA TGGTGAATCC ATCTTTAGAA AGAAGCGTGA    240
TTCTCCTTGA AGTGAGCCTG GCATTTGTCA GACAGGAAAC TCCCCAGGAG GAGCACCTGT    300
GGTGGTTTGG GTTGGGTTTG TTAAGTGCAG AGAGTGGGAA GAACAGATGC TCCTCACACC    360
GTCTCGAG                      368

```

(2) INFORMATION FOR SEQ ID NO:604:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 604 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:604:

```

GAATTCGGCC TTCATGGCCT AGGAAAGACC ATCAGCCTGG GAGTCAGTGA ACCTGACTCT    60
GATCCCAGCT CTGCCTCCAN TCAGCTGTGT GATGACAGGT AGGTCACCTT CCCTCTCTGA    120
GCCACAGTTT ATCTGTCTGT AACAGGGGT ATTGGACTGG ATTCTCTGTT ATCTCTCATG    180
TCTCTGTGAA AGGTCTGTGT TTTCAAATAC TCCTTAGGGA CATGACCTCA CATAGAAAGA    240
GGGGGTGCCA CGAACTGGAT TCCCAGCACT CCCCCTTCCC AGCTCTGCTC AAGCTGAGGG    300
ACCTTGAAC ATGGTACTTG GACCTAAGTA CTCTCTCTGG GCTTCAGTGT CCCCAGCTAT    360
AAAATGGGGG AAATGCCTAA CTCAGGAGGT TGAGGTAAGG ACAAAGGAA TTAATACATG    420
GAAAGTGCCT GGAACAGTGC CTGGCACAGT CTGCTTTCAG AAAAAGCTGC AAGGTGGCTA    480
CTCTCAGCAG ATATAAGTTA ATGCAGGAAC AGCAACTAGC AGCTCTTGA CATGCAATAT    540
ATTATATATT TTTTGCATCT TTTACCCTTC ACGGCACTGA GCCTCACAAT CCGTTGACCT    600
CGAG                      604

```

(2) INFORMATION FOR SEQ ID NO:605:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:605:

```

GCGCAGCCAG CGCCTGCCTC CGACTCGACT CCACACCTGC TTGCTACAGC GGGTGAGGAA      60
GCAGGAAAGG GGGAGGGAGG GATGTCGTCT GGATTCCTGT AATAATTTGT TTCATTGTTT      120
CCAATCGACT TAGTCACCAG GTTAAATAGT AGCATAGACC TTTCAAAAAA GTAGCTAGCT      180
TATAAGTAGA TGTATTGAAA ACACCTGCTT GTTGAGTCGT AGACAATTCC TCATTACTG      240
TGTGAACTCT AGGGGGTGAA ACACGGGCGG AGAGCGGCTG TGAGCTCACG CGGCTCCATC      300
CCCACAGCGG CCCAGGGTCA CTCGGGGCCA TTAATCAGGC CGCAGAGCTG CCCTCTGAGC      360
CGGGCCGCCA GCGCCACAG GGGCCAGACC AGGGCTCCCT GGGCGGGATG TTTTAAATCG      420
CACAGGGACA AAGGAAAGGA AAGACGCTGG GGCCAAGCC CGAGCTTATG AAACGTTATC      480
AAGGAGCGAC TCGAG                                     495

```

(2) INFORMATION FOR SEQ ID NO:606:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 331 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:606:

```

GAATTCGGCT TCATGGCCTA GACTTCCAAG GACATGCTTC GAACTCTGGC CCAAGCCAAG      60
AAGGAATGCT GGGATCGGTT CCTCCAGGAG AAGTTAGCTT CAGAGTTCTT TGTGGATGGA      120
CTTGATTCTG ATGAGAGGTG ACTACAATTG CAAAGTAGAA TTTGCTTTGA CACCTGATGC      180
CAGGACAATA GTATGTTACC ATCCTTCTAT AGACATTCCA TATGAACGCA CAAAACCTAT      240
CCCTTGACCA GATCCTGTGT ATAATAATGA AGAAACACAT GGTCAAGTGC TGAAAACCTAG      300
AGAAGAAAAA AGTGAACACC TGGAGCTCGA G                                     331

```

(2) INFORMATION FOR SEQ ID NO:607:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 632 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:607:

```

GAATTCGGCC TTCATGGCCT ACTGCCTCGG CCTCCCGAGT AGCTGGGACC ACAGACGCCC      60
ACCACCATGC CCGGCTAAAT TTTGTATTT TTAGTAGAGA CGGGTTTCAC CGTGTAGACC      120
AGGATGGTCT CGTCTCCCG ACCTCGTGAT CCGCCCGCCT CGGCCTCCCA AAGTGCTGGG      180
ATTACAGGCG TGAGCCAACT CGCCCGGCCA GGAATCCCTC CTCTGTCTGA CCTAAGTGCC      240
CTCTGCCCTG GAGCTGCTCA GCCTCTATCA ATTTTTCTGG CTCTCAGCGA ACGTTTTCAT      300
TCAGTTGCAA GACACAGAAA CTCAAATTCA AACCTGCTTA CACAAAATAG TGAATGTACT      360
GGCTCATGCA CTTTTTAAAG AGATGAGGTC TGTGTGCTG CCCAGGCTGG ATGTGAACTC      420
CCGGGCCCAA GAAATTCTCC TGCCTCAGTC TCCTGAGTAG CTGGGACCAC AGGAGCATGA      480
CTGTAAGTCC TGGTGTGAAT CAGGCTCCAG AAACAGCTTG ATCCTGGTTC CCAACAGTAT      540
GGTCAAAACT CATTCTCTCT TCTGTCTCT TCTCTATGAC AGGTGCTCCC TAAGAAGTGA      600
CAAAGAAGGC CACTAACAGC TCTGGGCTCG AG                                     632

```

(2) INFORMATION FOR SEQ ID NO:608:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 531 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:608:

```

GTATNGNTGA AAATAAGAAA AAATATTTCT GAAATTCGGG AACTTGAGAA CATAGAAGAA      60
CACCAGTCTG TAGATATTGC AACTTTGGAA GATGAAGCTC AGGAAAATAA AAGCAAAATG      120
AAAATGGTTG AGGAACATAT GGAGCAACAA AAAGAAAATA TGGAGCATCT TAAAAGTCTG      180
AAATAGAAAG CAGAAAATAA GTATGATGCA ATTAAATTCA AAATTAATCA ACTATCGGAG      240
CTAGCAGACC CACTTAAGGA TGAATTAAAC CTTGCTGATT CTGAAGTGGA TAACCAAAAA      300
CGAGGGAAAC GACATTATGA AGAAAAACAA AAAGAACACT TGGATACCTT AAATAAAAAA      360
AAACGAGAAC TGGATATGAA AGAGAAAGAA CTAGAGGAGA AAATGTCACA AGCAAGACAA      420
ATCTGCCCAG AGCGTATAGA AGTAGAAAAA TCTGCATCAA TTTTGGACAA AGAAATTAAT      480
CGATTAAGGC AGAAGATACA GGTAACAT GCTAGTCAAG GAGACCTCGA G              531

```

(2) INFORMATION FOR SEQ ID NO:609:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 330 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:609:

```

GTGACTTTGG AACCTTGAGA GTTAGATGAA TAAATCAGAA AAATGGAATT AAATGTATCT      60
ACTTTATTAT TGGTAAATCT GGTTAGGATG TGCAGCCCTA ATCAGGCTTC CTTAATTCCT      120
TCTCCACTGA GTCTGGACCA GCACTCTCCA GTAGAACTTT CTATGATGAC GGAATCCTC      180
TGTGTCTGCG CTGATCAGTG TGGTAGTTAC TGGCCACATG TGGCTGTTGA GTACTTGAAA      240
TGTGGCCAGT GTGGTGATGG AATTGTGTTT TTAATCTTAT TTAATTAA TTTAAATAGC      300
CAAATGTGGC TAGTGGCTGT TGTACTCGAG                                330

```

(2) INFORMATION FOR SEQ ID NO:610:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 345 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:610:

```

GTGGAGGCTT TCTTGATCAT GGATGGTGAA GATATACCAG ATTTTCAAG TTAAAGGAG      60
GAACTGCTT ATTGGAAGGA ACTTTCCTTG AAGTATAAGC AAAGCTTCCA GGAAGCTCGG      120
GATGAGCTAG TTGAATTCCA GGAAGGAAGC AGAGAATTAG AAGCAGAGTT GGAGGCACAA      180
TTAGTACAGG CTGAACAAAG AAATAGAGAC TTGCAGGCTG ATAACCAAAG ACTGAAATAT      240
GAAGTGGAGG CATTAAAGGA GAAGCTAGAG CATCAATATG CACAGAGCTA TAAGCAGGTC      300
TCAGTGTTAG AAGATGATT AAGTCAGACT CGGGCCGAAC TCGAG              345

```

(2) INFORMATION FOR SEQ ID NO:611:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:611:

```

GAATTCGGCC TTCATGGCCT AAATGACCAN ATCGAGAGGG AGGACTATGA GGACTTTGAG      60
TACATTCGGC GCCAGAAGCA ACCCAGGCCA CCCCCAAGCA GAAGGAGGAG GCCCGAGCGG      120
GTCTGGCCAG AGCCCCCTGA GGAGAAGGCC CCGGCCCCAG CCCCAGGAAGA GAGGATTGAG      180
CCTCCTGTGA ACCTCTGCTG CCCCCGCTGC CCCCTGACTA TGGTGATGGT TACGTGATCC      240
CCAACTACGA TGACATGGAC TATTACTTTG GGCCTCCTCC GCCCAGAAG CCCGATGCTG      300
AGCGCCAGAC GGACGAAGAG AAGGAGGAGC TGAAGAAACC CAAAAGGAG GACAGCAGCC      360
CCAAGGAGGA GACCGACAAG TGGGCAGTGG AGAAGGGCAA GGACCACAAA GAGCCCCGAA      420
AGGGCGAGGA GTTGGAGGAG GAGTGGACGC CTACGGAGAA AGTCAAGTGT CCCCCATTG      480
GGATGGAGTC ACACCGTATT GAGGACAACC AGATCCGAGC CTCCTCCATG CTGCGCCACG      540
GCCTGGGGGC ACAGCGCGGC CGGCTCAACA TGCAGACCGG TGCCACTGAG GACGACTACT      600
ATGATGGTGC GTGGTGTGCC GAGGTCACTC GAG                                     633

```

(2) INFORMATION FOR SEQ ID NO:612:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:612:

```

AAATACTAGA GATAAAGTAG ATTATGGCT TGGTAAGGAA ATTTTAAGCA TTCCTTCAAA      60
GATTGACGTG CTAAAATAAG CATTGATGTT TTGAGTTTTT TTACACCTAG GATTTTTAGC      120
TTGGGTGTGT AGGTGAAGGC CAAGACTCTC TGCAGGAAAA AGCTTATTTT CAAACTCAGA      180
AAATAAAATG TCAATCATAA AAATCTACTT CAACTTTAGC AAAAAGAAAA AAAAATCAA      240
CAAAAAGTAT ACTCTGTATG CTGGGATTCC GAGGTTCCAA CACTGTGTA CTCGAG          296

```

(2) INFORMATION FOR SEQ ID NO:613:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:613:

```

GATCCAGTGC TGCAGCTTCC TTACTATGAA ATGACAGCTC CACTTCCTAA TAGTGCATCC      60
GTGTCTTCCT CACTGAATCA TGTTCAGAT CTTGAGGCTG GACCCAGCTC ATATAAATGG      120
ACTCACCAAC AACCAAGTGA CTCTGACCTT TATCAGATGA CAGCTCCACT TCCTAATAGT      180
GCATCCGTGT CTTCCTCACT GAATCATGTT CCAGATCTTG AGGCTGGACC CAGCTCATAT      240
ATAATGGACT CGCCAACAAC CCCTCGAG                                     268

```

(2) INFORMATION FOR SEQ ID NO:614:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 272 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:614:

```
GGTGGAACT ATCCAAGAGG CCTTCTGAAT TCCTCTGACA TATATTTGAG AAATGGGCT      60
ACTGAAAGCC CTAACCCAC TTGGCTGCAT TTTATTTGGT AACCAGTGAG GCAAACACCC      120
TTGCCAGACC CCTACCATCC ATCTTGATGT GGTTCCTGCA CTGGACACTG CTGGGTACG      180
GGCCTGCCCA GATCTTGGGA ATGTGGGCAG TGGCTCCTCT GAAGCACCAG TGGGCAGAGG      240
ATGAGTCATG GTATCCTCCC GGCACCCTCG AG                                     272
```

(2) INFORMATION FOR SEQ ID NO:615:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 521 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:615:

```
GAATTCGGCC TTCATGGCCT AGTATTTTGT TAGAGACGGG GCTTCAGCAT ATTGGCCAGG      60
CTGGTCATGA ACTCCTGACC TCAGGTGATC CTCCTGCCTC AGCCTCCCAA AGTGCTGGGA      120
TTACAGGCAT GAACCACTGC ACCCAGTCAA GGGTATAAAA TTTCTACACA GCACAGGCAG      180
ATTCTGGCTG TGAAGACCC CAAGATTCCT TGAATTGTG ATGCTTTATT TAATTTAGAG      240
ATTATCTTCT CTGTCCCACT CTTCCCTTC CTAAAAAGGA CTAGATGCTT GCTGCTTAAT      300
TAGTAAAGCA AATTTAAGAT AATTTCTGCT TTTGAGATTT AGGGATAGAT TTTTAAACAT      360
AGTCTTGCTG ATAATGATAG ACATCCTGGG ATGTTGGAAA TTAGGAAACT TGAACCTTTA      420
TTTGCACAGA CTGAGAATTA TGAATGAGGA AAAGTTAGAG GATCAGAAAA AATAAATTTA      480
TAAATCACAA GCTAGGCTTG GCAATATGAG TGGCGCTCGA G                                     521
```

(2) INFORMATION FOR SEQ ID NO:616:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 577 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:616:

```
GAATTCGGCC TTCATGGCCT AGATTGGAAG GTGTGGTAGG CAGAAATCTG GCCCCATGA      60
CTGCCCCCTC CCCTCACACC CCCCGGGTTG CTCCAATGGT TATGTCACGT TGCTTGGCAA      120
AAGGGACTTT GTAGATGTCA TAAAAGGTGA CTAATCAGCT GACTTGAGAG AGTTTATCCT      180
GGATTATCCA AGGGGCCAG TGTAATTCCA AGAGCCCTCA AGAGCAGAGC TGGAGAGATG      240
CCGCGCAGGA GGCCTGGGTG CCGTTTCGGA GCAGGATGGA AGGCGGTGAA TCCCGCCTCC      300
AGCATGGAGC TCGGGAGAGG CCCTGACTGC AGATGGAGAG GCTGCCCTGG CCGCAGCGCA      360
CGGGGCTCCT GACCCACAAA AATCGCGAGA TAATGAGTTC ATGTTGTTTG AAAGTCCGTC      420
```

```

ATTCTGGTA ATTTGCTATA TAAACTATT GCTATACGAT TAAAACTAA TACAGAAGAA   480
TATTTCTTTA ACATTATGTT AAAAAGGAAA AAAGCTAACA TTTTCTTTAT AGCAAAACAC   540
TGCCATGATT TACATTAAAA TTAGGAACAT ACTCGAG                               577

```

(2) INFORMATION FOR SEQ ID NO:617:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 269 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:617:

```

GAATTCGGCC TTCATGGCCT AGCACATACA GTATAAAAA TAATCACCCA CCATAATTAT   60
ACCAAATTCC TCTTATCAAC TGCATACTAA GTGTTTTCAA TACAATTTT TCCGTATAAA   120
AATACTGGGA AAAATTGATA AATAACAGGT AAGAGAAAGA TATTCTAGG CAATTACTAG   180
GATCATTGG AAAAAGTGAG TACTGTGGAT ATTTAAATA TCACAGTAAC AAGATCATGC   240
TGTTCTTAC AGTATTGCGG GCCCTCGAG                               269

```

(2) INFORMATION FOR SEQ ID NO:618:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 469 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:618:

```

GAATTCGGCC TTCATGGATT CTGCTTTGAA TATAGCTACA GAAATAAAGG ATGGACTACA   60
ATGTGGGACA GTGTCTTCTC AGAAACAACC AGCCTTGAAG GCTACAAC TGAGGGAAGA   120
TTCTGTTTCG AATATAGCCA CAGAAATAAA GGATGGAGAA AAATCTGGGA CAGTGTCTTC   180
TCAGAAACAA CCAGCCTTGA AGGCTACAAC TGACGAGGAA GATTCTGTT TGAATATAGC   240
CACAGAAATA AAGGATGGAG AAAAATCTGA GACAGTGTCT TCTCAGAAAC AACCAGCCTT   300
GAAGGCTACA ACTGACGAGG AAGATTCTGT TTCGATTATA GCCACAGAAA TAAAGGACGG   360
AGAAAAATCT GGGACAGTGT CTTCTCGGAA AAAACCAGCC TTGAAGGCTA CAAGTGATGA   420
GAAAGATTCT TTTTCGAATA TAACCAGAGA AAAAAAGGAT GGAATCGAG                               469

```

(2) INFORMATION FOR SEQ ID NO:619:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 448 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:619:

```

GAATTCGGCC TTCATGGCCT AGTCCGTGTT GTGGTCAGTG TGTGAACTCC AACTGGACA   60
GTAGCTGAGT TTGGGCAGGG ATGAGGAGTG GAGGGGTGAG GTCTAAGTT CAGAAAAAGT   120
TTGTGTTTAA GAAGTTGGTT AACTGGAGT CAGTTGCAGA CCAGAAATGA GAAAGCACT   180
CTGACTTGA GTTGGGTGTG CTTGGGACTG GATCACCTTT GACCTTCTTT ATTTACCTAA   240

```

```

TTGGAGGGAA GAGCAGGGGA GGCAACACTA TTTCTCTTGG GTGTTAGAAAG AAGATTTCGAG      300
CTTATTTGGG CACTGGTCTC TATCTTTGCC TTCAGCTGAA TCAACATCTA AGATGTTTTA      360
GATGCTTAGC TAATTCCTCT TAAAAAAGA ATAAGCAGAG GCCGGACGTG GTGGCTCATA      420
GCTGTAATCC CAGCAGTGTG GTCTCGAG      448

```

(2) INFORMATION FOR SEQ ID NO:620:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 457 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:620:

```

GAATTCGGNC TTCATGGCCT ACTTAAATCC ATCAAGTTAC ACAATCGATC TGTGTGCAGC      60
TGAACAGAAC CACATTAAAT TTAAGCCAAA CACACCAATA GGAATGTTGG AGGTAGAGAA      120
GGTAATTTTA AAGCCAAAAA TGTTGGATAA GAAAAAACCT ACACCTATAA TACCAGAGAA      180
AACTGTGAGA GTAGTGATTA ATTTTAAGAA AACACAGAAG ACCATAGTGA GAGTGAGTCC      240
ACATGCATCG CTTCAAGAGC TTGCCCTAT TATATGTAGC AAATGTGAGT TTGATCCGTT      300
GCATACACTA TTGTTGAAAG ATTATCAATC GCAGGAGCCT CTTGACTTGA CAAAATCTCT      360
TAATGACCTG GGACTAAGAG AATTATATGC GATGGATGTC AACAGAGAGT CCTGCCAAAT      420
ATCACAAAAC CTAGATATTA TGAAGGAGGC CCTCGAG      457

```

(2) INFORMATION FOR SEQ ID NO:621:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 287 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:621:

```

GAATTCGGCC TTCATGGCCT ACTCTCTGAT TTACAGATTG CTAATTAAT GGCTATTATT      60
AGTTTGGATT AATTAGACTT AAGAAAACAA CTAAGTGGAG GTTTTTTTTG TTTGTTTTTT      120
GAGGGTTTTT TTTGCATGAG AATTGTATGT AACCAGTGAT ATGATTATTC CTGAATGTAC      180
AGACAGAAGT AAGCCTGGAC ATTGTAAAT AGTCCCTGCT TTAAGGGACT ACGATAATGT      240
GTACTATGAC AAACGTGCTT TATTCTTCTA ACGCAGTAAG TCTCGAG      287

```

(2) INFORMATION FOR SEQ ID NO:622:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 328 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:622:

```

GAATTCGGCC TTCATGGCCT AGTAGGTGTA TCACAGATTT CTAATGTAGA ATGGTCAGTC      60
CAGGAGTAAT TGAATTGTG GAAAAATGGA GAATTATAAA ACAAGAATGA TGTGCAAAAA      120
AGGACACAGT TGAATTCATC TGTGTTCTCT TAACTATTT CATTACTCA TTCATCCAAG      180

```

TTTTGAAAAA TGGTGGGAGT CTGAAAAATT CCAGGCACTC TGGATAAATG AGTATGGAAG	240
AATCCTCCAA AAGAACTTTT AGTCTACAGG GGAACATTAA TAAGCAATCA GGGACTTGAG	300
ACCTACAGTG CTGTGGAAGA TTCTCGAG	328

(2) INFORMATION FOR SEQ ID NO:623:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:623:

GAATTCGGCC TTCATGGCCT AGGACGTTTG GGTGTTTCC ATCTCAAATA AATAAATAAA	60
TAAAAGTCTA TAAAAACAGC TGGGCCCAGG CATTAAAAA AATGTTTCGGT CTTCTAGTTT	120
AGTCTTTTAT TGTCTATGCA AATTCTTTGG CTATTGAACT ATCCAAGCTT TCTCTTTTTA	180
AGCTTTTGGG GAATAGGTTG CAATACATT CTGTCTACT GTTCTCTTA GTGTTTCTA	240
ATTCTAACCC ACTGTTTTTG GAATTTCTAT TAGATGGTTT TGCAACTTCT GCATCTATCC	300
TCCATGCACC TTCACATTTC CTTACAGTT TTCGTGCTGT TTTCTTGTG TGCTACATTC	360
TGCACAGGAC TCGAG	375

(2) INFORMATION FOR SEQ ID NO:624:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 763 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:624:

GAATTCGGCC AAAGAGGCCT ACCTCAAAGG ATTGGCTAAA AGCAAGCAAC TGGATTGAAC	60
ACCCTAAGAA GAAAGATTCA CACTGCACCA GGAGACATCA GAAAGAATGA AAACCTCGCC	120
GCTGTTTGTG TGCATCTGTG CACTGAGTGC TTGCTTCTCG TTCAGTGAAG GTCGAGAAAG	180
GGATCATGAA CTACGTCACA GAAGGCATCA TCACCAATCA CCCAAATCTC ACTTTGAATT	240
ACCACATTAT CCTGGACTGC TAGCTCACCA GAAGCCGTTT ATTAGAAAGT CCTATAAATG	300
TCTGCACAAA CGCTGTAGGC CTAAGCTTCC ACCTTCACCT AATAACCCCC CCAAATTTCC	360
AAATCCTCAC CAGCCACCTA AACATCCAGA TAAAAATAGC AGTGTGGTCA ACCCTACCTT	420
AGTGGGTACA ACCCAAATTC CATCTGTGAC TTTCCCATCA GCTTCCACCA AAATTACTAC	480
CTTCCAAATG TGACTTTTCT TCCCCAGAAT GCCACCACCA TATCTTCAAG AGAAAATGTT	540
AACACAAGCT CTTCTGTAGC TACATTAGCA CCAGTGAATT CCCCAGCTCC ACAAGACANC	600
ACAGGTGCCC CACCCACACC TTGTGACAAC TACACNAGCT CCACCATCTT CCTCAGCTCC	660
ACCAGAGACC ACAGTNGCCC CACCCACACC TTTTGCAACT ACACNAGCTC CACCATCTTC	720
CTCAGCTCCA CCAGAGACCA CAGCTGCCCC ACCCATCTTC GAG	763

(2) INFORMATION FOR SEQ ID NO:625:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:625:

```

GAATTCGGCC AAAGAGGCCT AGTAGTTTCT ATGTGCGGTC TGGGGTGGGG GCAAGGCCCT      60
TGTGTTCCAC TGGTTTCCAC CACGTTGACA GCAGTCGCTG GCAGCAGAGA GCCATTTCCT      120
GTCATGCTGG TCTGTTCCAG GACTCTGTGG AAGATTCTCT ATCTCCACTG GCACAGGAGC      180
AGAGGAAATG GAAGGACTCA CAGGCAGAGC AGATCTCATC CCCCAAGCCT GTTGGGAGCC      240
ATTACTTTGG GTCGAAACAT TATTGTGAAC ACTAAGTTCT TCAGGTTTTG TAGCACATGC      300
TTTCATTTGT AGAGTTCGTC TAGAATATCG TTTGCTGGGC CTTCTTTCAA AGGATGTTGA      360
TCTTCTTGCT TTATTGGTTT TTGTGGTCTG ATACTCTGTT TTCCCACTAT ATCTAAATCG      420
TGATCCTAGT CGAATAAATC CTGATCGATG AGAACTCTTT TGGACGGGGC CTCGAG      476

```

(2) INFORMATION FOR SEQ ID NO:626:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:626:

```

GCGATTGAAT TCTAGACCTG CCTCAACTGT CTGGTTTCCT GTAAAATAAA CACATTGTTT      60
TATATTTTTA GGGAAACAAA AGTGCTGCTA TAGGGTTCAA AGTTTTCTTT CTGAACACTT      120
TTCCGAAACA AATTACCCCA AAGACACATT TTGAATATCC TGGTCACATC TTTGGATCTG      180
TAAAATATAC CTTTGTAGTAT GGCACCTGTT AAAATGCAAA GCAAAAACCT CGAG      234

```

(2) INFORMATION FOR SEQ ID NO:627:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 583 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:627:

```

GAATTCGGCC TTCATGGCCT AGGCCTTGTT AATCATTGAG CATAAGGAAC TGTCATATT      60
TTTTTGAGCT GTCAGAAATC CATTAGTGA TTTTCGACAA TTCAAAAAAA TATTTCTGAC      120
CGCTTGATTC AGTTCCTAGT GAATTAGGGA AGAAGAGGAA TAAAAGAAAT ATATCAATCT      180
AAATTATGAA CCCAGAGTCT AGCTTCCTGA ATTCTTCTCT GTGCTTAAAC GAACAACAGG      240
ATGTTGAGGT TCAAAAATAC TCTCTTCTAT TTCCCCCCTT TCCTTCCCTT TTCTTTCCTT      300
CTCTTCCATT CCTCGAAAAG ATAATAAAAC AGAATGTGCC TAGAGCTTCT GGAAAGAATA      360
CAGTCCTGCT GATACTAGAA CTCAGTGAAA TTTGCACCAG ATTTCTGAGC TACAGAACTG      420
AAGATAATTC ATTTATTTCA AGCCACTGAG TTTGTGGTAA ATTTGTTACA GTAGCAATAA      480
AAATCTAATA CATGCCTTCT ATACCAGAAG TACACATCCA CGTGACCATT CCTGTCCTCA      540
CCCCACACAC ACATACACAC ACACACACAC ACGCACACTC GAG      583

```

(2) INFORMATION FOR SEQ ID NO:628:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:628:

```
GAATTCGGCC TTCATGGCCT ACCTGCCTCG AGTTCCTACT GCGCCCGGGC GGCCTGCACA    60
GAGCTGCTGC CCTCCAGAGA CTGTGAATCC CAAGCCTGAC TCAGTGGACT GCTTCCTGTT    120
CCCCTCCCTC CTCTTCCTCA CCTTGTTCTG CACCCTCAAG CCTTCTCCA ATGCCTCCCA    180
GGAGGATTTG GGGACTTTCT CCCTGGGGCG CCCAGATCCA GCTCGGAGGC CTCACTGGGA    240
CCTGGCAAGG CCTGACCTCC CGCCCAAAC TGTCTCTGTA GCGCCCTAC TCGAG          295
```

(2) INFORMATION FOR SEQ ID NO:629:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:629:

```
GAATTCGGCC TTCATGGCCT AACCTGTTGC TTCCCCTGGG ACTGAAGGCA GAAGTGACTC    60
CCGAAATCTCT CTTTCTGGAC TCAGAAGGAA ACCAAAGCAA TTGATGACAC CGCATCCCAT    120
ACTAAAAGCT ATGGAAGAGA GAGCAATTCA ACGAGCTGAA TGTAGGCGGA TCTTGGCAGA    180
GAAGNAGAAA AAACAAGAAG AAGANAAATT GGCCCAAGTT AAGGCCCAAG AGGAGGAACG    240
TCAGAAAAGG GAGGCAGAAG AAAAGGAGGC ACAGCTTGAA AGAAAACGAG AAGAGAAGAG    300
ACTGAAGAAA ATGAAAGAAC TTGAGAAGCA GAAGAGAACT CGAG          344
```

(2) INFORMATION FOR SEQ ID NO:630:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:630:

```
GAATTCGGCC TTCATGGCCT AGTTCTTCTCT TAGGAACAAG GGCAGGACCT CAAACAGTCC    60
AGAGGAGAAG CCTGGGGTGG TCAGGGAAGG CTTCCTGGCT GAGAGGACAG GCTTAGGGGC    120
ACCTTGAAAG TTCAGGCTGA CTGGGGCTAG GGGCATGTGG GTAACAGTT AAAGGGGGGG    180
GGGCTGGAAA ATGCAGACAC CAAAGACCCT TCAATATGAG GCCAAGAAAG GAAGGTTTCTAG    240
AACAGGGATC ACTCGAG          257
```

(2) INFORMATION FOR SEQ ID NO:631:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:631:

```

GTTCCAAATC CATGGGAACC AGCACAGGAG CTACAGCAAA TCATGGCACT TCTGCAGTAG      60
CAATTACTAG CCATGATTAC CTAGGACAAG AAACTTTGAC AGAAATCCAA ACCTCACCAG      120
AAACATCAAT GAGAGAGGTG AAAGCGGACG GAGCTAGCAC CCCCAGGTTA AGAGAACAGG      180
ACTGTGGTGA ACCTGCCCTCG CCAGCAGCAT CCATCTCCAG ACTCTCTGGG GAACAGGTCTG      240
ACGGGAAGGG CCAGGCAGGC AGTGTATCTG AAAGTGCGCG GAGTGAAGGA AGGATTAGTC      300
CAAAGAGTGA TATTACTGAG CTCGAG                                         326

```

(2) INFORMATION FOR SEQ ID NO:632:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 480 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:632:

```

GAAAAAATGG AAGAATTGTG TTGTAAGGTA TGGGAAGGTC GGTGGCGAGT GATCCCTCAT      60
GATGTACTAC CAGACTGGCT CAAGGATAAT GACTTCCTCT TGCATGGACA CCGGCCTCCT      120
ATGCCTTCTT TCCGGGCCTG TTTTAAGAGC ATTTTCAGAA TACACACAGA AACAGGCAAC      180
ATTGGACAC ATCTCTTAGG TTGTGTATTC TTCCTGTGCC TGGGGATCTT TTATATGTTT      240
CGCCCAAATA TCTCCTTTGT GGCCCTCTG CAAGAGAAGG TGGTCTTTGG ATTATTTTTC      300
TTAGGAGCCA TTCTCTGCCT TTCTTTTCA TGGCTCTTCC ACACAGTCTA CTGCCACTCA      360
GAGGGGGTCT CTCGGCTCTT CTCTAACTG GATTACTCTG GTATTGCTCT TCTGATTATG      420
GGAAGTTTGT TTCCTTGGCT TTATTATTCT TTCTACTGTA ATCCACAACC TATTCTCGAG      480

```

(2) INFORMATION FOR SEQ ID NO:633:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 307 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:633:

```

GAATTCGGCC TTCATGGCCT AGCGGGATCG TATCACTACG CACGTGGCGT CAATGACAAA      60
GACGCCTTCC CCACGGGACA GGCCCTGGGA ACTGCGGGGC AAGGTGTGGG CACGGCGGGT      120
CGCCTTCCAA CCCTCCAGGG TCTCCGTCC TGCCCCCTCT CCAAGACCCA GAGATTCTCT      180
CCATCCGGTG CCTCCGGGAG CCCAGGGTCT GGGGAGTGTC TGGCTATGGC GGGGCGGGTG      240
CTTTTtaggg GAGGGAATCC AGCATTGGG AAACCAGATC TGTTCTCCTT CTTTCCCTTC      300
CCTCGAG                                         307

```

(2) INFORMATION FOR SEQ ID NO:634:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 458 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:634:

```

CCTCTGCAAG AAATGCCTAA GCGTATTATC AGGAAGTGGA ATTATAAAAT GTTTCAGAT      60
CAAATTAAGC ATCTACAGGT GAATTAATAT AGAATTAAGC TTAGAAAGCT TAAGTAGAAG      120
TTGAATGAAT TGTGTTTCATT CTTTGAAACC CATTGATTG CAAAACCAAT ATTCCACTGT      180
CTATAGGAGG CAATTCAGAC TGAAAATAAT TTAGAAAAAA AAATAGTCCA GAAAAAATAA      240
TAGTTCTAGA GATAAATAGG TCATTGGAAG ACTAACCTCT GCCATTAGGG GTTTCCTAAG      300
ATAGGCTGAC TCTATCTATT TAATAATTAT TTTGTTTCATT AACTCCTTGC ATATAGAATT      360
GTAAGTGATA CCAGCCAGGT ACGGTGGCTC ACGCCTGTAA TCCCAGCACT TTGGGAGGCC      420
AAGGCGGGCA GATCACCTAA GGTCTGGAGT CTCTCGAG      458

```

(2) INFORMATION FOR SEQ ID NO:635:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:635:

```

GAATTCGGCC TTCATGGCCT ACCCACTCTC ACTTTGTACC TCTGTCAGTT ATCTCCTCTT      60
TACCCTTCTT TCAACGAGCA TACCACGGGC CCTCCAGCA CCTATGGCCC AAGCCAGTTG      120
TTTGCAAATT TTACTAGTG ACACAGGACA ATTTACACAC ACATACACAG TTCACTTGT      180
GACATACTTT TTTTGTGAGA TGGAGTCTCA CTTCAATGCC CAGGCTGGAG TGCAGTGGTG      240
TGATCACACC TTATTGCAGC CTCAACTCC TGGGCTCAAG TGGTCTTCCT GCCTCAGCCC      300
CCCTAGTAGC CAGGATTACA GCGGTGCACC ACCATTCTTC GAG      343

```

(2) INFORMATION FOR SEQ ID NO:636:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:636:

```

GTGGATAACA AACAAACAAA TCTGATGCTC CCTGAGTCAA CTGTTTATGG TGATGTGGAC      60
CTTAGTAACA AAATCAATGA GATGAAAACC TTCAATAGCC CAAATCTGAA GGATGGGCGT      120
TTTGTCATC CATCAGGGCA GCCTACTCCT TACGCCACCA CTCAGCTCAT CCAGTCAAAC      180
CTCAGCAACA ACATGAACAA TGGCAGCGGG GACTCTGGCG AGAAGCACTG GAAACCACTG      240
GGACAGCAGA AACAAAGAAGT GGCACCAAGT CAGTACAACA TCGTGGAGCA AAACAAGCTG      300
AACAAAGATT ATCGAGCAAA TGACACAGTT CCTCCAATA TCCCATACAA CCAATCATAC      360
GACCAGAACA CAGGAGGATC CTACAACAGC ACAGAGCTCG AG      402

```

(2) INFORMATION FOR SEQ ID NO:637:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:637:

GCTTCCTCGC	AGCAAGCGGC	TGGAGATAGA	GAAGAGCTTA	CTGGTGCGAG	CGTCCGTCGA	60
CCCCGTGCGC	GCTGACCTAG	AGATGGCAGC	CGGTCTCACC	GACATATTTC	AGCATGATAC	120
ATACTGTGGT	GATGTCTGGA	ACACCAACAA	ACGCCAGAAT	GGCAGACTCA	TGTGGCTCTA	180
TCTCAAATAC	TGGGAACTCG	TTGTGGAAT	GAAGAAGTTT	AAGAGAGTAG	AGGAAGCCAT	240
ACTAGAAAAG	TAAGACAAGA	GTGAAATCAA	ACTGCTTTTA	GTGACTCGAG		290

(2) INFORMATION FOR SEQ ID NO:638:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:638:

GTGAGAAAA	TGGGGATAAT	GGAGAAATTG	TGGGCAAGCT	GGCTTCCTGG	GAAGGGACTA	60
ATTGAACAAG	ACAATGATTT	ATCTTTTCGG	GGTTCAGAGG	CAGCTTGTTA	ATTCAATTA	120
TTTCTTTAT	TTTGGCCAC	AAGTGTTTGG	TTGTCCTTTT	CTCTGGCTTT	TTACCTGATC	180
AGGCTGCAAG	CTGCAAGGT	GTGGCTTGTG	CTGCAGATT	GTAATAAAAG	ATGACAGGTG	240
AGAGAGACAG	TGGTGGAAT	GGTAGAGCTT	GCACACCCAC	ACGGTGTGGC	TGCTCGGGAG	300
GCTGTCTAGT	GCACCTGCCA	ACAGAGCACA	GATATCCTCT	CTTCCTCAT	TCAGATTCTT	360
CCTTCCAGCT	GTTTACTAAA	CAGCAACAAA	AACACCCTCT	TGGCTGTAAC	TTGTCAAATA	420
AAGTCCCTGC	AAAGTGATA	AGATTTTCCT	CCCCAACCTC	GAG		463

(2) INFORMATION FOR SEQ ID NO:639:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:639:

GCGAGGGAGA	TGGCAGCCTG	GGCTTTAGCA	GCAGGGAGGA	AGGTGAANAA	AGAACCGGGG	60
CTTGACAGAG	AGGTGGGTTT	TGCTTAAAG	GCAGAGACCC	CCAACAACCTG	GAATGCCACG	120
GAAGACCAGC	ATGAGCCTAC	CAAACCTTTG	GTTTCGAGGG	CTGGAGCTAA	TTCTCGCTCC	180
AGGAGAAAGA	AGCAGAAGAA	GAATCCAGG	CAGGAAGCAG	TGCCCTGGAA	AAAACCCAAA	240
GGCATCAATT	CCAACAGCAC	AGCTAACTTG	GAGGATCCTG	AGGTGGGTGA	TGCTGAAAGC	300
ATGGCGATCT	CAGAGCCGAT	CAAGGGCAGC	AGAAAGCCCT	GTGTGAATAA	GGAGGAGTTG	360
GCTTTGAAGA	AGCCCATGGC	GAAATGTGCC	TGGAAGGGTC	CCAGAGAGCC	ACCTCAGGAT	420
GCCCGGGCAG	AAGCCGAGAG	CCCAGGAGGC	GCCTCTGAGT	CAGACCAAGA	TGGTGGCCAT	480
GAAAGCCAC	CAAAGAAGAA	GGCCGAGCTC	GAG			513

(2) INFORMATION FOR SEQ ID NO:640:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:640:

```

GAATTCGGCC TTCATGGCCT ACACCTCAGC CTCCAGAGCA GCTGGGACTA CAAACGTGTG      60
CCACCATGCC GGGCTAATTT TTGTATTTTC AGCAGAGGTG GGGTTTCACC ATGCTGCTGG      120
CCAGGCTGGT CTCGAACTCC TGGCTTCAAG TAATCTGCCC ACCACAACCT CCCAAAGTGC      180
TGGGATTACA GGTGTGAGCC ACTGCGCCCA ACCAAGAGCT CCTTTTGTGTT TTTCTTTT    240
TGTGAATTCG GATTCTTTAT ATTCAAGAGT TTTACTTAAA CTTTGAATCT GAAAGAAACT      300
TTAGGAGGAG CTCATAGATT TGTGGAAGA AGCAAACTA CATTATTTTC TCTCTTCTAA      360
AATCATATTC CATGTATTTT GATCTTTTAC TGAATTTTAA CACATTGTTT CATCACTAAC      420
ATAAAGTGTT TCAATAGTTT TTGTAACCTA CACACAAATA CTGGATTAA AAGTTATATA      480
CCTGAGTATA TTTTATGGC AGGTCTCGAG      510

```

(2) INFORMATION FOR SEQ ID NO:641:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 308 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:641:

```

GAATTCGGCC TTCATGGCCT AGTGTTCCTA GCCAGTCTCT ATTCTCTCAC CTAACACTCT      60
CAAGGAGATA GAAGCTTCAG CTGAAGTCTC ACCCACCACG ATGACCTCCC CCATCTCACC      120
CCACTTCACA GTGACAGAAC GCCAGACCTT CCAGCCCTGG CCTGAGAGGC TCAGCAACAA      180
CGTGGAAGAG CTCCTACAAT CCTCCTTGTC CCTGGGAGGC CAGGAGCAAG CGCCAGAGCA      240
CAAGCAGGAG CAAGGAGTGG AGCACAGGCA GGAGCCGACA CAAGAACACA AGCAGGAAGA      300
GGCTCGAG      308

```

(2) INFORMATION FOR SEQ ID NO:642:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:642:

```

GAATTCGGCC TTCATGGCCT AGTTAGATGA AAATCTAAAG GATGAATACT TTGAGGAAAT      60
CATGGAAGAA TATGAAGATA TTAGACAGGG CCATTATGAG TCTCTCAAGG AGAGGAGATA      120
CTTACCCTTA AGTCAAGCCA GAAAAAGTGG TTTCCAAATG GATTGGCTGT CTGAACCTCA      180
CCCAGTGAAG CCCACGTTTA TTGGGACCCA GGTCTTTGAA GACTATGACC TGCAAGAAGCT      240
GGTGGACTAC ATTGACTGGA AGCCTTTCTT TGATGTCTGG CAGCTCCGGG GCAACCCAC      300
TCGAG      305

```

(2) INFORMATION FOR SEQ ID NO:643:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 301 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:643:

```

GCGATTGAAT TCTAGACCTG CACCCAGCCA ACGTGGAGAG ATTTTAATGA GTACTTTTAT      60
CCACCTGACC ACCATCATTG CCTATCACCT GTCATTCTTC ATCCACCCTA CATCCATCCT      120
TCATCCCCCC ATCATCCACC CATCTATCCT TCATCCATCC ATTCATCATG GAACCATTAT      180
CCATCCAACT ATCATCCAGC CAGCCAGAAA TGACCCATTC ATCTTCATCT CTCATTTCCT      240
CTCTCTAAAC CAGTTCTTAA TCTGGGGCCA AAGTCCTACC CACACATCCC TTAGTCTCGA      300
G                                                                           301

```

(2) INFORMATION FOR SEQ ID NO:644:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 408 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:644:

```

GAATTCGGCC TTCATGGCCT AGATCCCCCG TGGAGAAAGC AGTGACACAT TCACACAGCT      60
GTTCCCTCGC ATGTTATTTC ATGAACATGA CCTGTTTTTC TGCCTAGAC ACACAGAGTG      120
GAACAGCCGT ATGCTTAAAG TACATGGGCC AGTGGGACTG GAAGTGACCT GTACAAGTGA      180
TGCAAAGGAG GGTTCCAAAG AAAAAGGATT TTGTTTAAAA TACTTTAAAA ATGTTATTTC      240
CTGCATCCCT TGGCTGTGAT GCCCTCTCCT CGATTTCCTA GGGGCTCTGG GAGGGACCCT      300
TCTAAGAAGA TTGGGCAGTT GGGTTTCTGG CTTGAGATGA ATCCAAGCAG CAGAATGAGC      360
CAGGAGTAGC AGGAGATGGG CAAAGAAAAC TGGGGTGCAC GCCTCGAG                    408

```

(2) INFORMATION FOR SEQ ID NO:645:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 364 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:645:

```

GAATTCGGCC TTCATGGCCT AGTTATGTGA TTAGGAGTAG GGTAGGATG ANTGGGAAGA      60
AGAAAGAGAG GAAGTAAAGT TTAATTATGC CTTTTGGGT TTATTATCCC TGATGCATGT      120
GGCCCCCACC TGCTGTGTCC TTCTCCTGTT GGCTAGGGTT AGACCACACA GGCTAAACTA      180
ATTCCGATTG GCTAATTAA AGAGAATGAC GAGGTAAGTG TTTTGGCGGG AAAAATGGTT      240
ATGACAGAGC AGGTAATAGG AATGAGTTAG GGTGGAGTAG GTAATCGGAA TGAGTCAGGG      300
TGGAGCAGGT AATTGGAATG AGTCAGGGTA GAGCAGGTAA TCGAAAAAGG TTGCTTTGCT      360
CGAG                                                                           364

```

(2) INFORMATION FOR SEQ ID NO:646:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:646:

```

GAATTCGGCC TTCATGGCCT AGGAGTGCAT TTGGATCTAG TGTTTTCTAT CAATCTGTCT      60
GCTGATGTGG CACTACTGCA CCATTTACCA CAACATTAGA ATATGTCTGA GTAACGGTT      120
GGCTTAGATT TTTTGCATTG AGTCCACCC CATTITCCAG AACTTTCATG GCTATCTTA      180
TATGTTTGT TCCGTAAGA TCTTAGGAT CAATTTGTCT AGTTCTAAAG AGGAAATTCT      240
GATATTATTG ATTTAGTAAC TTCCATGAA AAAAACCTAC CATCACAGGA AAGATGCACA      300
TTAATTACAG GTAGCTCGAG                                         320

```

(2) INFORMATION FOR SEQ ID NO:647:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:647:

```

GAATTCGGCC TTCATGGCCT AGTCAGTGGC TAGATTGATT GATCCTCCAG AATTAGACAC      60
TCACATGTTA ACACCACTCT CAGTTGGAGG GCTGATAGTA AACCTTATTG GTATCTGTGC      120
CTTTAGCCAT GCCCATAGCC ATGCCCATGG AGCTTCTCAA GGAAGCTGTC ACTCATCTGA      180
TCACAGCCAT TCACACCATA TGCATGGACA CAGTGACCAT GGGCATGGTC ACAGCCACGG      240
ATCTGCGGGT GGAGGCGAGG TCTCGAG                                         267

```

(2) INFORMATION FOR SEQ ID NO:648:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:648:

```

GAATTCGGCT TCATGGCTAC TTTTGGTAAA GCATACCCAA CCTTCAGTTA GAATATCTCC      60
TGATAATAAG AAAGATCTCA TTGAAATTTA TTAATCTTT TGTGTCTAGT AGATAACTTG      120
GATGGCACAC AGTGCTTTGA TTTTACCTG CCCAGAATT AACTCCTCAT CCTATCCTAC      180
ATGATTTTCT TTTTCTCTC CCCCTTCTC TTTTATTCCA TGCACTGGG AATGGCAGGT      240
CTTGACCAA GTAATGGCAG GTCTGCACC AAGCAAGCCA GAAACCTGAG CTTTAGTCTT      300
TATTCCTCCC CACTTCTCGA G                                         321

```

(2) INFORMATION FOR SEQ ID NO:649:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 559 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:649:

```

GAATTCGGCC TTCATGGCCT AGAGGAAGTG AACGGATGGG GCCTCATCCT CCTGCCTCCC      60
TAAAGGGTGA GGGTGAAGG ATGGGGCTGT GCCCTCTTAG GGCAGGGAAA AACAGCTTGG      120
AGGGGTTTCT GCCATCAGAG ATCCCATAGG AGGCAGGTCA GTCCTGCAGA ATTTCTCCCC      180

```


AGTCTGGCCT	CCAGCCTCCC	TGGCCCTTT	CTAGAGGCCT	CCATCCCCT	GGCGGCTTGC	240
TCCTGCCACC	GGGCCTCTGC	ACAGTCACCT	CCTGCAGCCT	GGGGTGTGTC	GCCTCTCCAC	300
GTCTTGATAT	TTTTGCTGGA	ATGCAGACGA	TACTATATTT	ACCGTATAAT	ATATTATCAG	360
CTCTCCTATA	TCTCAGTCAA	TTTACATAGT	TTAAAATAGA	ACATCTTATT	AAAAACATCT	420
AGATATACAC	AGATTAGGAA	ACGCTTACAA	CATACAAATA	CACAAACTAG	AAATAAATCT	480
TTAGCATACT	GGTATATACA	ACAGTGTGAT	ACAATAAATA	ATTTCATTCA	TGCTCTATCT	540
ACACATCATA	TTGCTCGAG					559

(2) INFORMATION FOR SEQ ID NO:650:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 477 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:650:

GAATTCGGCC	TTCATGGCCT	AGGGAGACTG	AGGCAGGCAG	ATCACCTGGG	GTCGGGAGTT	60
CGAGACCAGC	CTGACCAGCA	GGGAGAAACC	CCGTCTCTAC	TAAGAATAGA	AAATTAGGTG	120
TGGCGGTGCA	TGCCTGTGGT	CCCAGCTACT	CGGGAGGCTG	AGGTAGGAGA	ATCGCTTGAA	180
CCCGGGAGGC	GGAGGTCAATG	GTGGGCCGGG	ATTGCACCAT	TGCACTCCAG	CCTGGGCAAC	240
AAGAGTGAAA	CTCCATCTCA	AAAAAATAAA	AGCCTAGCCT	CCCAAAGTGC	CAGGATTACA	300
GGCATGAGCC	ACCGCGCCTG	TCTGTCCGCC	CGTCTTCTTT	TTTAAGAGCA	AGAAAAGGTT	360
TCCCAGAAGT	ACTCTGGTAG	ATTCTTATCA	CACACACATT	CCTAAACCAG	TTACTGGCAA	420
AGAAAATAGA	ATTATCATGA	TTAATTAGCA	TATTCTGAAG	NACATGCTTC	CCTCGAG	477

(2) INFORMATION FOR SEQ ID NO:651:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 414 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:651:

GTGTGAACCT	ACGGGAAGGC	GGCCGCCTGC	ACCTCTGTGC	GGAGACCAAG	GATGATGCC	60
TAGCATGGAA	GACAGCACTG	CTGGAGGCAA	ACTCCACCCC	GGTGCGCGTC	TACAGCCCGT	120
ACCAAGACTA	CTACGAGGTG	GTGCCCCCCA	ATGCACACGA	GGCCACGTAT	GTCCGCAGCT	180
ACTACGGACC	GCCCTACGCA	GGCCCTGGCG	TGACGCACGT	GATAGTGCGG	GAGGATCCCT	240
GCTACAGCGC	CGGCGCCCTT	CTGGCCATGG	GCATGCTTGC	GGGAGCCGCC	ACTGGGGCGG	300
CGCTGGGCTC	GCTCATGTGG	TGCCCCTGCT	GGTTCTGAGC	CCTGGGACTC	GGAGCACTGA	360
CCCCTGCGCT	TGGATTGCTA	GACTCCTCTT	CCTCCTGGAC	CCCATCCTCT	CGAG	414

(2) INFORMATION FOR SEQ ID NO:652:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 325 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:652:

```

GAAGGAAAAC ATGGGCACAG GGGATTTTAT CTGCATTTCC ATGACTGGAG GGGCGCCCTG      60
GGGGTTCAGA TTGCAAGGTG GCAAGGAGCA GAAGCAGCCC TTACAAGTTG CAAAGATTCTG      120
AAATCAGAGC AAAGCCTCTG GGTCTGGGCT CTGTGAGGGA GATGAAGTGG TTTCCATCAA      180
TGGCAACCCT TGTGCAGATC TCACCTACCC TGAAGTCATC AAGCTCATGG AAAGCATAAC      240
AGACTCTCTC CAAATGCTCA TCAAAAGACC ATCCAGTGGA ATAAGTGAGG CTTTGATATC      300
TGAAAATGAA AACTCTAACC TCGAG                                     325

```

(2) INFORMATION FOR SEQ ID NO:653:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 443 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:653:

```

GAATTCGGCC TTCATGGCCT AGGTATTTAG GCTTTTGTCT TAACAGCAAA TCCTGGCTGT      60
CTGGGGCCTG ATGACTGTGT TCCATGGGTA TCCACTCCCT GTCCACAGTG TGGGAGCCCC      120
TCAGCTGCTT ATTGCAGGGA CACAGAGCCC GGCAATGGTCC AGAAGGCGGG CTTATGGGGC      180
CTGCAGCACA CAGGGAAAGT GAGCCCACAC TGTGATAGGA GGGCAGACAC ACAGGATGTG      240
TTCTGTGTTA CAGGGTTGCC GTGAAGAATT TCATTCTTTT GCAAGGACTG GAGAGAAAAT      300
TTTATGTGGA AGGTAGCCCT TGGAAATGAC CTCAAAGAAT AGGTAGGATC TTAGCCTGCG      360
TTTGAAAGCC TGGAAAAAAA CAGGATGACA GGATGAAGAG GCCACAGCAC AGCTGCAGAC      420
AATGGGAGTG CGGAGATCTC GAG                                     443

```

(2) INFORMATION FOR SEQ ID NO:654:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 311 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:654:

```

GGGAGCGCCG GTGGTTCATC CTGACCGATA ACTGCCTCTA TTAATTGAA TACACAACAG      60
ATAAGGAGCC CAGGGGAATC ATCCCGTTGG AAAACCTCAG CATCAGGGAG GTGGAGGACC      120
CCCGGAAACC CAACTGTTTT GAGCTCTACA ATCCAGCCA CAAAGGGCAG GTCATCAAGG      180
CCTGTAAGAC GGAGGCCGAC GGCNGCGTGG TAGAGGGGAA CCATGTGGTG TACCGGATCT      240
CAGCCCCGAG CCCGAGGAG AAGGAGGAGT GGATGAAATC CATCAAAGCC AGTATCAGCA      300
GATCCCTCGA G                                     311

```

(2) INFORMATION FOR SEQ ID NO:655:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 346 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:655:

```

GGGGGATACG GATACCCAAA CTTCAATGTT CCTTGATAGT AGGAAGGAGG ACAGTTATAT      60
AGACCATAAG GTGCCTTGCA CAGATTCACA AGTGCAGGTC AAGTTGGAGG ACCACAAAAT      120
AGTAACTGCC TGCTTGCCCTG TGGAAACATGT TAATCAGCTG ACTACTGAGC CAGCTACAGG      180
GCCCTTTTCT GAAACTCAGT CATCTTTAAG GGATTCTGAG GAGGAAGTAG ATGTGGTGGG      240
AGATAGCAGT GCCTCAAAAG AGCAGTGTAA AGAAAACACC AATAACGAAC TGGACACAAG      300
TCTTGAGAGT ATGCCAGCCT CCGGAGAACC TGAACCATCT CTCGAG                      346

```

(2) INFORMATION FOR SEQ ID NO:656:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 116 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:656:

```

GAATTCGGCC AAAGAGGCCT ACTAAACCGT CGATTGAATT CTCGAGGCAG GTCTAGAATT      60
CAATCGACGG TTTAGGCTCC CTATAGTGAG TCGTATTAAT TTCAGAGGTG TATTTA          116

```

(2) INFORMATION FOR SEQ ID NO:657:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 482 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:657:

```

GAATTCGGCC AAAGAGGCCT AGGGATGAGG GTGAAGAAGG GGAGAGGGTT GGTTAGAGAT      60
ACAGTGTGGG TGGTGGGGGT GGTAGGAAAT GCAGGTTGAA GGAATTCTC TGGGGCTTTG      120
GGGAATTTAG TGCCTGGGTG AGCCAAGAAA ATACTAATTA ATAATAGTAA GTTGTTAGTG      180
TTGGTTAAGT TGTGCTNGG AAGTGAGAAG TTGCTTAGAA ACTTTCCAAA GTGCTTAGAA      240
CTTTAAGTGC AAACAGACAA ACTAACAAAC AAAAATTGTT TTGCTTTGCT ACAAGGTGGG      300
GAAGACTGAA GAAGTGTAA CTGAAAACAG GTGACACAGA GTCACCAGTT TTCCGAGAAC      360
CAAAGGGAGG GGTGTGTGAT GCCATCTCAC AGGCAGGGGA AATGTCTTTA CCAGCTTCGG      420
TGGCTGGCAC GTGTTACCAG GCCGAGTGGG ATGACTATGT GCCCAAAC TG TACGAGCTCG      480
AG

```

(2) INFORMATION FOR SEQ ID NO:658:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 430 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:658:

```

GAATTCGGCC AAAGAGGCCT AGTCGAGTCC CTTCTGTCCC AGTCGTTTCT GCCTCTTGTC      60
CCACGCAACT CCAGCTTGTA CCATGCCGGT CAAAGGAGGT AGCAAGTGCA TCAAATACCT      120
GCTCTTCGGA TTAACTTCA TCTTCTGGCT CGCTGGCATT GCAGTGCTTG CTATTGGACT      180

```

ATGGCTCCGA	TTCGACTCTC	AGACCAAGAG	CATCTTCGAG	CAAGAGAATA	ACCATTCCAG	240
TTTCTACACA	GGAGTGTACA	TTCTGATTGG	AGCCGGGGCC	CTCATGATGC	TGGTTGGTTT	300
CCTGGGCTGC	TGTGGAGCTG	TACAAGAGTC	CCAGTGCATG	CTGGGATTGT	TCTTCGGGTT	360
CCTCTTGGTG	ATATTCGCCA	TTGAGATAGC	CGCCGCCGTC	TGGGGCTATA	CCCACAAGAG	420
TCGAGTCGAG						430

(2) INFORMATION FOR SEQ ID NO:659:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 290 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:659:

GAATTCGGCC	TTCATGGCCT	AAGAGTACAG	AGATTTCACT	TCATCTTGTG	CTAATGTTTA	60
ATTNAAAGTA	TATTGACACT	AGTAAAGACA	CTTTATTTTA	ATTTGAGGTA	TAAATGTCCTA	120
CCTAAAATAG	ACTATTTCCA	TTGAGTCATA	CATTTTAAAT	GTGGTATATA	TTCTTATATT	180
TCAGAAAATG	ATAACTATCA	TAGAAATCTA	ATACTCATT	ATTTGATTAA	TAATTATTTT	240
TTTCTCTCAA	TTTGGAATA	TCTTTTCCTA	TGTAATGGTC	ATGTCTCGAG		290

(2) INFORMATION FOR SEQ ID NO:660:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:660:

GAATTCGGCC	TTCATGGCCT	AGTCAGAAGT	CTTTGTGTCC	CTGTTTTTGT	GTCCATTTC	60
TGTACCTTGG	CACTTTAAGG	CTTGTCCTGC	AAAATAAAAC	ATTGCATCAT	CACTTGTGAA	120
GGCAGAGCTT	GGGAGTTTGC	ACTGCTAAGA	TGAGGATAGG	AAAGAAATTT	ATGCCGCAGG	180
GCCTTTGATG	CTGCCCCTC	ACCTGTCTGC	ACAGCCAGGG	CACGGCCAGC	GGGAGTGGAG	240
AAGACGAGCG	AGACCAAAC	CTTGCCGTGG	GGAGGAGGGT	GGCATAGCCA	TTGATAAATC	300
GGGACTTGAA	CTATCCCATC	ACTCTAAAAA	TATTTTTTAT	CTGATTACAA	AAGTAATAGA	360
TGGCCAGGCA	TGATGGCTCA	TGCTGTAAAT	CCCAACACTC	CTCGAG		406

(2) INFORMATION FOR SEQ ID NO:661:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 461 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:661:

GAATTCGGCC	TTCATGGCCT	AGTGGAAGT	AAAACCTCAG	GGAGGCATCA	AACCCAGGCT	60
TGGGGGACAA	AACTAAGTCT	TGCCAGAGTC	CTGAAGGATG	AACAACAGTT	AACCAAGCAA	120
GGGATACTGG	AGGGCATGGA	GGCTCTCTGG	CCTGGAGTGC	AGAGCATGGA	GTGCTCAAAG	180

```

AGCTAGTTAG CTCTGCAAAG CTGAGTGTC A GGAATGTAAA GGGAGAGAAT AGGAGTGAGA      240
GAAGAGTCTG GCAAGGCAGA CAGGGAAGGC CTATATGCCT TGATGGAGAA CCACTGAAGG      300
ATTTAAAGAA GGAGAGGGTT AATTTGTGCC AATAGAAAGA TCACATTGTG TGTAGTGTGG      360
AGGATGGGTT GCAGAGAGAG AAGCTAGAGA CCAAAGATG AGACGGGAAC AGCTGCAAA      420
TTCGAGAGCT CGTAAGATTA TGTATGGCTG GACCACTCGA G                                461

```

(2) INFORMATION FOR SEQ ID NO:662:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:662:

```

GAATTCGGCC TTCATGGCCT AGCCTGAGCT CAGGAGTTCA AGACCAGCCT GGGCAACACA      60
GTGAAACTCC ATCTCTACTA AAATACATAA AAATTAGCTG GGCTGGAGG CATGCACCTG      120
TGGTCCCAGT GCTACTGGGG AGGCTGAGGC AGGAGAATTG CTTGGGCCCG GGAGGCAGAG      180
GTTGCAGTGA GCCAAGATCG CGCCACTGCA CTCCAGCCTG GGCAACAGAG CGAGACTCCA      240
TCTCAACAA ACAAACAAAC AAACAACAA ACAAACAAC AGTTATTTT TTCTCACCAT      300
TCTAAAGAA GTTACATTG ATTCTTTTC AAAATTGGT CAGTTTGTAT AGTCTTATTT      360
CTCCATACTT TCATTCCCC TTTTATTTC GTAAATAAT TGAACCTTAT ATTCCTTATA      420
TGATAATTTT AATATCCAAA GTCATTGGTC ATATTCTCCA GTTCATGATT TCTGCTGAGT      480
TTGTGGTGCT GATTTTCTCG AG                                502

```

(2) INFORMATION FOR SEQ ID NO:663:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:663:

```

GAATTCGGCC TTCATGGCCT ACAACCACCA ACATTGTGT TTTTGCAGAT GAACAGGTTG      60
ACAGAAGTCC CACTGGCTCA GGAGTGACAG CCCGAATTGC CTTACAGTAT CACAAAGGGC      120
TTCTGGAAGT GAACCAGATG AGAGCCTTCA AAAGCAGTGC AACTGGCTCA GTATTCACAG      180
GGAAAGCTGT GAGGGTAAGT GGCACCCTTA GCTTCTTATT TATAAATGTG TCACTCATGA      240
GACTGGAGAG GCCTGAGTTG GGTGTTTGAT AAATTCTTC ACTCAGCTCT CAGAAGAGAA      300
TTTTAAAGCA GGCCTGTAAA AACTTCTTTT CAACTAGGAC ATTGGTTATC CAGTGTGGTC      360
TTGGGGCCCC AGCGGGCCCC TAAGGTCCTT TCCATGGGTT CAGAGGTCA AAACGTGTGT      420
CATAATAATG ACATTATTG CTTTCACTC TCATTCTCTC AAGAGGTAC AGTGGGTTAC      480
TCGAG                                485

```

(2) INFORMATION FOR SEQ ID NO:664:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:664:

GAATTCGGCC	TTCATGGCCT	AAAAATTATA	AAGTGTAATA	TATCTTTGTA	TCTCTAGTTT	60
TTCTCCTTTC	CCCAGATAAG	AATAAAAGCA	GGCTGCAGGC	TCCTGGGGTG	ATAACCCACT	120
TGGGTCGAGT	TCCATCGCTG	TTGGCGATAA	ATCTTGTTGG	TGTTCACTTT	TTGGGTTCTC	180
ACTACCTTTA	TGAGCTATAA	CACTCACCTC	GAAGGTCTGC	AGCTTCACTC	CTGAAGCCAG	240
CGAGAGTACG	AACCCACAGG	CAGGAAGAAA	CTCTGAACAC	ATCCGAACAT	TGGAAAGAAC	300
AAACTCCAAA	CAAGCCGCTT	TTAAGAACTG	TAACACTCAC	AACTCGAG		348

(2) INFORMATION FOR SEQ ID NO:665:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:665:

GAATTCGGCC	TTCATGGCCT	AGTCGTTATC	AGAGGTGGAG	ACATTAGAA	GTTGTTCTTA	60
ATCAGAGTGA	AGCTTGTGCT	TCGGAAAGTC	AACCTCACTC	CTCAGCACTC	ACAGCACCTA	120
GCTCTCCAGG	TTCTCATGG	ATGAAGAAGG	ACCAGCCCAC	ATTTACCCTC	CGACAAGTTG	180
GCATAATATG	TGAGCGCCTC	TTAAAAGACT	ATGAAGATAA	AATTCGGGAG	GAGTATGAGC	240
AAATCCTCAA	TACCAAATA	GCAGAACAA	ATGAATCTTT	TGTGAAATTC	ACACATGATC	300
AGATTATGCG	ACGGTATGGG	ACAAGGCCAA	CAAGCTATGT	GTCATGAAGC	TTTGTCCAT	360
ATCTGGGTAC	CAGGTTTGAC	CTCAAGAGAT	GGCTGCTGTA	CACTTTTTCG	AACTGGTTTG	420
ATGTCACATT	TCAGCTCCAA	CTTTGCATCC	TGAGAACACT	TAAACGTTTC	TGCAGGTCCA	480
TTTATACAA	CTTGAAGAC	CGTAAACTT	TCTGGTTGCC	ACAAGCATAT	CTTTCTTTTC	540
TGCTCATCCA	ATAAACAGCT	GAGCCCTCGA	G			571

(2) INFORMATION FOR SEQ ID NO:666:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:666:

GGGATCATT	TTATTCAGCT	ACTGAGAACT	AGAATATTAA	GAGACTGCTG	GCAAGGCAAG	60
CAGTTAATTT	TCAGTTGAAA	TGCAATTAAA	TAAAAAGTAT	TTTCTTGCTT	TGTGGAAGCA	120
CGTGAATTTT	TGTAAAAAGC	TGCTTGTTTT	CCCCATTTAC	AGGTTCTGTA	CAGAGTAATG	180
AGATGTGTGA	CGGCTGCAAA	CCAGGTGTTT	TTTTCTGAGG	CTGTGTTGAC	AGCTGCTAAT	240
GAGTGTGTG	GTGTTTGTCT	CGGCAGCTTG	AATCCTAGCA	TGACTATACA	TTGTGACATG	300
GTCATTACAT	ATGGATTAGA	CCAACTGGAG	AATTGCCAGA	CTTGTGGTAC	CAATTATATC	360
ATCTCAGTCT	TGAATTTACT	CACGCTGGTA	TGTGAATTAT	TCTTTTCCTT	TTTAATGTGT	420
TGTTTATTTC	AGGCCATCT	CGAG				444

(2) INFORMATION FOR SEQ ID NO:667:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 524 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:667:

```

GGGAACTGAC AAGCAATTAA CTGGAGAATA AGTGAGGGGA ATGGAGCAGT AGTATTCTTT      60
AACTTAATTT GCCATTTAAG AGAGCACTTG GAATCTGAAG AAAGTCTATC CCTACCAAGG      120
AAACGGAGTC AAATTGCAAT TAAGATTAAC TTTGGTTATA TGGAAAGCAAG AATCATGCTT      180
CTCATCATCA ATTGCGTCTC TTTGGTAGCC AATAATTCCA TCTGTAATCA TGGCAGCAAC      240
TTAAGTATTG CCAATGTTTT CAAATGTGTT ACAGCATTAA GGCATCCACA TCTAAAGAGG      300
CAGTTTTTAAA CAAGAGGAAA ACGGAACTGA AATGTGCCAA GAAGTGAACA CGGACATGGC      360
CTCTCCTGGA ATACTGCCCA CCATGCCAGC AAGCTCTTCC TCCAGTCAAG AAGGCCTGTG      420
CCACGCTGCT TGGTTCCTCG CTGCCTGAAG ATGCATTGTA GCCCTATGAG ATTAGTATGG      480
CTATTTCTGT CTGCTGACCA GGAGAGAAAT GAGTAGTTCT CGAG                          524

```

(2) INFORMATION FOR SEQ ID NO:668:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 554 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:668:

```

GAATTCGGCC AAAGAGGCCT ACACAGAGGG ATAATTGGCA TTGGTATCAA CTGACATATT      60
CACAACTTTG AATAAACTT TCCACATTTG GAAAATCACC ATGCCTGGCC CCTAGGCTAT      120
ACTTTGAAAA CCACTGCTTT AGTGTTTTAG AAATTGTTAC CCTCATACTA ATATTTACTA      180
CACCCCCCAC CTTGACAATA CATACAAAAG AGGAGTAACA GTTTCCCAT A CCTTTCTAA      240
ATTTGAGTCT TATTAAACCA GACTCATAGC CCTTGTGAC TTTTCTTCCT GATCTGTGCC      300
TTATCCCTAG GCGGGTGATC ATGCGGGTAT CTGCTAATTG GCAGATGTGA GTGGTTATAC      360
CTATTTACAA GCAACTCATT GCAAAAATAA TTTTAGCTAA AGAAAACATC CATGGCCAGA      420
GAATAAGTTT TGGAAATTGA TATGTTAAAT GAGCTTTATG TTTACCTTTA AAAGGTTAAA      480
ATATTTACCA TTCATGGATT ACCTTTTTC AGAAAGTAAG AATATATAAA TTACATTTAA      540
TCTTGAAGCT CGAG                          554

```

(2) INFORMATION FOR SEQ ID NO:669:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:669:

```

GAATTCGGCC TTCATGGCCT AATCGTATTC CATCTACTGC ATACTTTTCA TAGATGTCCT      60
CCATCAGAAG CACCTATGGT TGTGTTTAA ACGTGTATT TCCTGATCCC ACCCCAGGAT      120
TTCTGAGTAT TCTAAGAATT TCTAAGTGTG AGGCCTGGAA ATATGCATTT TACAACCCCC      180
TAGAACATTC TTATGTGCAC TAAAATTTGA GAACCACTAA TCTGGTGTAT ATACTGTTGT      240
TACTTAATAT TTTCTTAATG ATAGATACTT GGATGATTTT TGACTTTATT ATTATTATAA      300
GCAATGTTGT AAACATCACA CAGGCCAAG                          329

```

(2) INFORMATION FOR SEQ ID NO:670:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 267 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:670:

```
GGCGTATGAT ACCTAAAGTG GAGTGGTCCG CGTTCCTGGA GGCGGCCGAT AACTTGCGTC      60
TGATCCAGGT GCCGAAAGGG CCGGTTGAGG GATATGAGGA GAATGAGGAG TTTCTGAGGA      120
CCATGCACCA CCTGCTGCTG GAGGTGGAAG TGATAGAGGG CACCCTGCAG TGCCCGGAAT      180
CTGGACGTAT GTTCCCATC AGCCGCGGGA TCCCAACAT GCTGCTGAGT GAAGAGGAAA      240
CTGAGAGTTG ATTGCACCAG ACTCGAG      267
```

(2) INFORMATION FOR SEQ ID NO:671:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 429 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:671:

```
GAATTCGGCC TTCATGGCCT ATTATCTCTC AAAAACAAG CAATAAGTAC CAAGAAATAG      60
CAACAAAAAT TAGCTTGTA GGTGTTTTC TGAGGGTAGA AATGGCTCTT GATGCCATGT      120
GGAGCAATGG GAAGGAGGCT TTCTAGTTAC ACAGACTCTT GGTCTGCCA CTTATTCATT      180
TTATTTTATT TTATATTTA CTTTAAATTT TTTGAGATAG GGTTCACCC TGTCGCCCAG      240
GCTGGTGGGC AGTGGCTCAC TGCAGCCTCG AACTACCAGG CTGAAGTGAT GCTCTTACCT      300
CAGCCTTTTC AGTAGTTGGG ACAACAGGTG CACACCACCA TTCCTGGCTA ATTAACAAAAA      360
TTTTTTTGTG GGAACATGGC AAGACCTGT CTCTATTAAC AACACAGCA ACAGCAACAA      420
CAACTCGAG      429
```

(2) INFORMATION FOR SEQ ID NO:672:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 357 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:672:

```
GTAAATCGT TCTTGAGAGG AACGTCTCTG TGCGAAGAGA TAATGAGTTT AGCTCTGAGA      60
AGTGAGCTTG TAGTGACAA AACAAAGAGG AAAAAAGAA GAGAACTGTC TGAGGAACAG      120
AAACAAGAAA TTAAAGATGC TTTTGAACCT TTTGATACAG ACAAAGATGA AGCAATAGAT      180
TATCATGAAT TAAAGGTGGC AATGAGAGCC TTGGGGTTTG ATGTAAAAAA AGCTGATGTA      240
CTGAAGATTC TTAAAGATTA TGACAGAGAA GCCACAGGGA AAATCACCTT TGAAGATTTT      300
AATGAAGTTG TGACAGACTG GATATTGGAA AGAGATCCCC ATGAAGAAAT ACTCGAG      357
```

(2) INFORMATION FOR SEQ ID NO:673:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 292 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:673:

GGTAGATACT	GGTTTTTCGT	ATCCTGCTTC	TCTTAAGGGC	AGCTCTTTT	AGCATACTCC	60
CATGCAGCAA	CAGAAATTG	TATCTTTTT	TTCTTTTTT	AGATGGAGTC	TCGCTCTATC	120
ACTAGGCTGG	AGTGCACTGG	CACAATCTCG	GCTCACTGCA	ACCTCTGCCT	CCTGGTTCAA	180
GCGATTCTCC	TGCCCTAGCC	TCCTGAGTAC	CTGGGACTAC	AGGTGCGCGC	CACCACACCC	240
AGCTAATTTT	TATATTTT	GTAGAGACGG	GGTTTACCA	TGTGGCCTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:674:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 470 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:674:

GGATGGACAT	CAGCACTTTA	CGGCGCCAGC	TGAGACCCAC	AGGCCAGCTC	CGTGGAGGGC	60
TCAAGGGCTC	CAAGAGTGAG	GATTCGGAGC	TGCCCCGCA	GACGGCCTCC	GAGGCTCCCA	120
GTGAGGGGTC	TAGAGAAGC	TCATCCGACC	TCATCACCTC	CCCAGCCACC	ACTCCCCCAT	180
GTCCACCAA	GAAGGAATGG	GAAGGGCCAG	CCACCTCGTA	CATGACATGC	AGCGCTTACC	240
AGAAGGTCCA	GGAATCGGAG	ATCAGCTTCC	CCGCGGGCGT	GGAGGTGCAG	GTGCTGGAGA	300
AGCAGGAGAG	CGGGTGGTGG	TATGTGAGGT	TTGGGGAGCT	GGAGGGCTGG	GCCCCTTCCC	360
ACTATTTGGT	GCTGGATGAG	AACGAGCAAC	CTGACCCCTC	TGGCAAAGAG	CTGGACACAG	420
TGCCCCCAA	GGGCAAGCAG	AACGAAGCCA	AGTCAGACAT	CCAATCGAG		470

(2) INFORMATION FOR SEQ ID NO:675:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 637 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:675:

GAATTCGGCC	AAAGAGGCCT	AGTCGCTCTT	GCTGAAACCT	TCAATGCAGT	GAGCGCCCAT	60
CTCATTGGGA	CCTACAGGCT	GAAGTTCTTC	CTCTGATGGA	CATGACCCCC	GTGTTGTCTC	120
TAATAACCTC	ACTTTCATCT	TGTTCCAGCC	ACACGGGGTT	TCTGTCTTTC	TCGGGTCATG	180
TCGGGCTTAT	GTGCCTCGGG	CCCTTTGCTC	ATGCTGTTCT	CTGCCTGGGA	TGCGCTTTAC	240
TGGGTGCCAG	GATGGTCAGT	GATTCCATTT	CTCTCAGAGT	CTATTCACAG	GTCCCCCTTCT	300
CGGTCACGCC	TTCTCTGGCT	CCACTGTCTA	AAATTTCAAC	AGCTGCCTCT	GCCCCCGGAA	360
CTTCATATCC	CCCTTATCTG	CCTTTTTTCC	TTCAGCTCTT	ACTTCCATCA	AATACAGTAT	420
GTATTTTAA	AAGTCTTATC	TTGTTACGG	TCATTTTCTT	CCACAGGTAA	TTTGTGTAAG	480
CTTTGTAAGA	TTGATGATGT	TTAATACTGT	TTGTTTAAAT	ACAGTACCCC	CAGTTTAGCA	540
CACAGCTTTT	GAATGAATGA	CCAGTTTTTA	TTCCCCCTCTG	AAGCGCTAAG	AGCTGCCGCT	600
GAGGTGGCAT	CTGTAGCNGC	TCCCGCTCCA	ACTCGAG			637

(2) INFORMATION FOR SEQ ID NO:676:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:676:

```

GAACACGTCA TGAGGAAGGA GCAGCGCAAG GAGGAGAAGG AGAAGCGGCG CCTCGACCAG      60
CTGGAACGTA AGAAGGAGAC GCAGCGCCTA CTGGAGGAGG AGGACTCCAA GCTCAAGGGC      120
GGCAAGGCGC CGCGGGTGGC CACGTCCAGC AAGGTCACCC GGGCCAGAT CGAGGACACG      180
CTGCGCCGAG ACCATCAGCT CAGGGAGGCC CCGGACACAG CCGAGAAAGC CAAGAGCCAT      240
CTGGAGGTGC CGCTGGAGGA GAACGTGAAC CGCCGCGTGC TGGAGGAGGG CAGCGTGGAG      300
GCGCGCACCA TCGAGGACGC CATTGCAGTG CTCAGCGTGG CCGAGGAGGC GGCCGACCGG      360
CACCCAGAAA GACGCATGCG GGCAGCCTTC ACAGCCTTTG AGGAAGCCCA GCTGCCGCGG      420
CTCAAACAAG AGAACCCCAA CATGCGGCTG TCGCAGCTGA AACAGCTGCT CAAGAAGGAG      480
TGGCTCCGCT CTCCTGACAA CCCCAACTC GAG                                     513

```

(2) INFORMATION FOR SEQ ID NO:677:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:677:

```

GTCCATCCTG AGCTCCATGG AGAAGCCACC CAGCCTCGGT GACCAGGAGA CTCGGCGCAA      60
GGCCCGAGAA CAGGCCGCCC GCCTGAAGAA ACTACAAGAG CAAGAGAAAC AACAGAAAGT      120
GGAGTTTCGT AAAAGGATGG AGAAGGAGGT GTCAGATTTC ATTCAAGACA GTGGGCAGAT      180
CAAGAAAAAG TTTCAGCCAA TGAACAAGAT CGAGAGGAGC ATACTACATG ATGTGGTGGG      240
AGTGGCTGGC CTGACATCCT TCTCCTTTGG GGAAGATGAT GACTGTCGCT ATGTCATGAT      300
CTTCAAAAAG GAGTTTGAC CCTCAGATGA AGAGCTAGAC TCTTACCGTC GTGGAGAGGA      360
ATGGGCCCCC CTCGAG                                     376

```

(2) INFORMATION FOR SEQ ID NO:678:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:678:

```

GAATTCGGCC TTCATGCCTA GCAGGAGGTT TTATTGTAAA GAGGCCGATT GTACAGAGCA      60
AAGATTGTTT TGACACGGGG GGCTGGGTGG TGGGACCCAG AGGCCAGAGC TGGGTGAAGG      120
ATGAGGGGTG GCATCGCCCC ATCCAGGCAG TGGGCAGGGC AGGGAGGACT AAACGGCTGC      180
CTCCAGTTT CCTTCCCTGC CCCTCATTAC TGGGTAAGAG GGAGCCAGGC TATTTCCACG      240
GATCCAGGAG AATATAGCAG GAGACCCTCA CCACCCACA CCATGCCCCA AGGATACGGG      300

```

AGGTGCCCCA GTCTGGCTTT TGCAGTCGGC CAGCTCCCAG CCTCCTCGAG

350

(2) INFORMATION FOR SEQ ID NO:679:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:679:

GAATTCGGCC	TTCATGGCCT	AGTTCTCACC	GGGGAAAAAC	CCACTGTTAG	GATGGCATGA	60
ACATTTCTTT	AGATCGTGGT	CAGCTCCGAG	GAATGTGGCG	TCCAGGCTCT	TTGAGAGCCA	120
TGGGCTGCAC	CCGGCCGTAG	GCTAGTGTA	CTCGCATCCC	ATTGCAGTGC	CGTTTCTTGA	180
CTGTGTTGCT	GTCTCTTA^A	TTAACCGTGC	TGAGGCTCCA	CATAGCTCCT	GGACCTGTGT	240
CTAGTACATA	CTGAAGCGAT	GGTCAGAGTG	TGTAGAGTGA	AGTTGCTGTG	CCCACATTGT	300
TTGAACTCGC	GTACCCCGTA	GATACATTGT	GCAACGTTCT	TCTGTTATTG	CCTCGAG	357

(2) INFORMATION FOR SEQ ID NO:680:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:680:

GGGGGTGGAA	GGCGTAGTGC	TTGAAATGCA	GGGATCTGGC	AGTCAGCAGA	AGGATCTGAG	60
ACCCAGTGTC	GAGGTAAAA	AAAAACAAA	AAACAAAAA	CCAATGCAGG	AATCCAGTGG	120
GTGGAGTGAG	GGGATCTGGG	ATCCAGTGAT	GGGGCCCCCA	GGATCCAGGC	ATTGTGGTTG	180
TCAGGATCCA	GTGGTGAGGT	TTGTTGACAT	CCAGAATCCA	GCAGCTGAGC	TTGGAGATCC	240
AGGGCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:681:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:681:

GGATTCCTAC	AAAAATTGAG	GCAGAAGATC	AAAATCGGAG	TGGTAGGCGG	ATCGGACTTT	60
GAGAAAGTGC	AGGAGCAACT	GGGAAATGAT	GAATATTCAA	AGTCATCTGG	GTGAGGCCCT	120
AATCCAAGAT	TTAATCAACT	ACTGTCTGAG	CTACATTGCG	AAAATTAAAC	TCCCGAAGAA	180
GAGGGGTACT	TTCATTGAAT	TCCGAAATGG	GATGTTAAAC	GTGTCCCCTA	TTGGAAGAAG	240
CTGCAGCCAA	GAAGAACGCA	TTGAGTTCTA	CGAACTCGAT	AAAAAGAAA	ATATAAGACA	300
AAAGTTTGTA	GCAGATCTAC	GGAAAGAGTT	TGCTGGAAAA	GGCCTCACGT	TTTCCATAGG	360
AGGCCAGATC	AGCTTTGATG	TCTTCCTGA	TGGATGAAAA	CTCGAG		406

(2) INFORMATION FOR SEQ ID NO:682:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 316 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:682:

```
GAATTCGGCC TTCATGGCCT ACCCTTCTAG GTGTCATCTC CTCCTCTCCC TTTCCCCCAA      60
GACTCCCTCT GGGCCCAGCC AGCAGGTGAA GCCTGACTTA GGAAGGGGGG GATTTCAGG      120
GGAGGGGGCCC TGGCCCCCAG TGACCCAGCA TTGCTATCCA CAGGAGGAGC AGCCCCCACA      180
ACATCGATCC AAGAGGGGGG GCTCAGTGGG CGGCGTGTGC TACCTGTCTGA TGGGCATGGT      240
CGTGCTGCTC ATGGGCCTCG TGTTCGCCTC TGTCTACATC TACAGATACT TCTTCCTTGC      300
GCAGCTGTCC CTCGAG                                     316
```

(2) INFORMATION FOR SEQ ID NO:683:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 394 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:683:

```
GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCGGCCTCCC AAAGTGCTGG      60
GATTACAGGT GTGAGCTAGC ACTCCCAGCC GACAGGTGCT TCTTAAATGT TTTCTTTGAG      120
CAGGAATTGG TCCAGGAATT GGTTCCTCAAG TTAGAAGGAA AATTGAGGG GAAGAATTG      180
TTTTTCTCC AATCAGTCTC TGATTAAATA GTTATTAGGA AAAACTCCTT GCTTATGTCT      240
TTGTATTGCA CATTTTATA TATGTATATA TGTGTAAATA GAGATATTTA TATATTCACA      300
GACAAACACG TGTATGCACA TTTCACAATG GAGGAAGAAG GGATATGGTG TGCACTGAGG      360
TAAAGTGAGC AGGGATACAG AAGAGAACT CGAG                                     394
```

(2) INFORMATION FOR SEQ ID NO:684:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 509 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:684:

```
GTCCTAACCT TGGGTCCAAG TTTCGTTATA GTGGCAGGAC ACAAGCGCAA ACGAGAAGAG      60
CCAGTGCCTT GATAGATCGC CCAGCACCTT ACTTTGAACG CTCATCCAGC AAACGTTATA      120
CCATGTCTCG CAGCTTGGAT GGAGCATCAG TGAATGAAAA CCATGAAATA TACATGAAGG      180
ATTCTATGTC TGCTGCAGAG GTTGGTACTG GCCAGTACGC CACAACAAAA GGCATCTCTC      240
AGACCAACTT GATCACCCT GTGACTCCGG AGAAGAAGGC TGAGGAGGAG CGGGACGAGG      300
AAGAGGACAA ACGGAGGAAG GGGGAAGAAG TCACGCCCAT CTCGGCCATC CGGCACGAGG      360
GAAAGACTGA CAGTGAGCGC ACGGACACCG CAGCCGACGG GGAGACCACC GCCACTGAGT      420
CGGACCAGGA GGAAGATGCA GAGCTCAAGG CACAGGAGCT AGAAAAAACT CAAGATGACC      480
```

TGATGAAACA TCAAACCAAC ATTCTCGAG

509

(2) INFORMATION FOR SEQ ID NO:685:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:685:

```

GAATTCGGCC TTCATGGCCT ACCAAAGTGC TAGGATTACA GCGTGAGCC ACTGCGCCTG      60
GCCTCTTTCT TCTTTCTTGA ATTCTCTTCT TTTTATGTTT CTGGGAAAAT CCTACTCATT      120
TTATATGATT TGGCTGATGT AAAGCCACCA TTGTCTTCCT AAGCAGAGAG GGTCTTGCTT      180
TTGGGTGCTG CACAACCTTG TGCAATTTT CTGTTACATC ATTTATCTTT TGGGGATTGT      240
TTATTTTCAT ACTTATCTCT CTTCCAGGAC CATGTTAGGG AGAGGTGTTT TTAATTTTTA      300
CCTTTTCTGC AGCACTTAGC ACAGTGCCTA ATCATAGTAA ATATCACGTA AAAGTTGAAT      360
GAAGGAATGG ATGTTTGATA TAGAGTTAGG ACACCTGTGT CCAGGTCTGG CTTTGCTTTT      420
CCTTTNACCC CCCACCTCGA G                                         441

```

(2) INFORMATION FOR SEQ ID NO:686:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:686:

```

GAATTCGGCC TTCATGGCCT AGTTGGTTTA TGTTATGTAA AGTTATGTAG TTATGTAAAG      60
GTGCTGAAAT GTCACTCTTG TGATTATGTT TTATTATATA AGGCTCTATC TTAGCAAACC      120
AGGAGAGAAA TTCTCCTGAT GGCCTTGAAG AAGCAAACAG CCACCTGGTT AAGCCCTGT      180
GGATAGTGCC AAGTGGCAGG AAAGTGGGAG CCACCTCTAG GACCTGAGGA TTAAAGTCAG      240
TAAGAGCTGG GACCTCACTC ATGCAGACTC GAG                               273

```

(2) INFORMATION FOR SEQ ID NO:687:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:687:

```

GAATTCGGCC AAAGAGGCCT AGGGCTCTGG ATTTTGAGTT TCGGGCTCTA GATGGAATTG      60
AGAAGGTCCA ACTTGCTCAG AGGGCCCTGG AGGCTCATCT GACTTCACCC GGATTTTCCT      120
CGAG                                         124

```

(2) INFORMATION FOR SEQ ID NO:688:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 426 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:688:

```
GAATTCGGCC AAAGAGGCCT ATGCCATCTT AGTCCCTCTT CCCAACCCCA TTTTGTAGTT      60
ACTTTCCTTT CATTAAAATA TCCTTATGCA CTTACAAATA AAATAAGTC CCAAGAGGGC      120
AACAAAATAT AAGATTCTTA ATGATACAAA AACAAATCTT TCTGATACTA GATCTTTTAT      180
ACTAGAAAAA TAAATTCTTG TGCTTGAACA TCATTTTAA GCACTTAGTG AATTGAGAAT      240
CTGAAGTGGC ACTTGAAATA TTCCCGGGA AGAAACATTA TGAACCAAAT GAAGGAACAT      300
AGCTATTCAA AGGGACATAT TTTTGTACTT GTTTTGCTCC AATTCTGCT ACATAGACTG      360
CTCCAGTCTT TCTGTCGACT CTAGGAGATG CCTAAACCGT CGATTGAATT CTAGACCTGC      420
CTCGAG                                         426
```

(2) INFORMATION FOR SEQ ID NO:689:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 205 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:689:

```
GAATTCGGCC AAAGAGGCCT ATAGTTTTT CATGTTACAT CTTTGTAGATT ATTTTCTTTT      60
GAATCTATCT GTGACTATAT TTAAAGTCAA TTCTTGTTTT TTCCTTTTCC TTTTGTGGG      120
TAACGGGGTC TCGCTGTGTT GCCCAGGCAG ATCTCAAACCT CCTGGGCTCA AGCTGTCCTC      180
CCACCTCTGC CACCCTAGGC TCGAG                                         205
```

(2) INFORMATION FOR SEQ ID NO:690:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 100 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:690:

```
GAATTCGGCC AAAGAGGCCT ACGTTGATTG AGCACTGAGC CCTTACTACG TGCTAGGCAT      60
GGTACATGCA TGGCCTTATT TAATCCTATC AACCTCGAG                                         100
```

(2) INFORMATION FOR SEQ ID NO:691:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 302 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:691:

```
GAATTCGGCC AAAGAGGCCT ACATCATACA AGTCGTCGTA AAGCAAATCT GAGCTGTTGT    60
CATTGGAAGG CACTTTAGTT TTGATGCAGT ATTCCGCCAG GGTGTGGGG ACCTTCACTC    120
CATCCTTTTC TGCTTCGGCC TTAGTGGCTG AAACCTGTTT CCTAATAATT TCAGCATATT    180
CTTTGTCTTT TCCTTTACTG TCTCTCCATT TCCTGAACAT AACTGAAGCA TCGACATTGG    240
CTGGGGAGAA GGTGTGGGC TCATTAAGCA GTGAGATTAC ACTTAATAGG ATAGTCTCTC    300
AG                                                                    302
```

(2) INFORMATION FOR SEQ ID NO:692:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 662 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:692:

```
GAATTCGGCC AAAGAGGCCT ACCAAATACC AGGCTACCAT GGTCTACAAG ACTCTCTTCG    60
CTCTTTGCAT CTTAACTGCA GGATGGAGGG TACAGAGTCT GCCTACATCA GCTCCTTTGT    120
CTGTTTCTCT TCCGACAAAC ATTGTACCAC CGACCACCAT CTGGACTAGC TCTCCACAAA    180
ACACTGATGC AGACACTGCC TCCCCATCCA ACGGCACTCA CAACAACCTCG GTGTCCCAG    240
TTACAGCATC AGCCCCAACA TCTCTGCTTC CTAAGAACAT TTCCATAGAG TCCAGAGAAG    300
AGGAGATCAC CAGCCCAGGT TCGAATTGGG AAGGCACAAA CACAGACCCC TCACCTTCTG    360
GGTTCTCGTC AACAAAGCGT GGAGTCCACT TAACAACCAC GTTGGAGGAA CACAGCTCGG    420
GCACTCCTGA AGCAGGCGTG GCAGCTACAC TGTCGCAGTC CGCTGCTGAG CCTCCACAC    480
TCATCTCCCC TCAAGCTCCA GCCTCATCAC CCTCATCCCT ATCAACCTCA CCACCTGAGG    540
TCTTTTCTGC CTCGTTACT ACCAACCATA GCTCCACTGT GACCAGCACC CAACCCACTG    600
GAGCTCCAAC TGCACCAGAG TCCCCGACAG AGGAGTCCAG CTCTGACCAC ACGACCCCTC    660
AG                                                                    662
```

(2) INFORMATION FOR SEQ ID NO:693:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:693:

```
GAATTCGGCC AAAGAGGCCT AAGCCCCCAA AACACGCTCT TTTGTGCCTC CCCTCAAATC    60
CTTCACAGTG TTCTTCCATA TCCACTCCTT CCAGGAAGCA TGTTCTCACT ACCCCAGTTC    120
ATGTGGGTTT CTTCCTCTC AGAATTTCTA TCATGCCCTT ATAAGTTTAG CAAATTGTCC    180
TTCTCTAATT GTTTCACATC TGTCCATCCG ATATCCCAGG AGGACTGTCA GCTCTATGAA    240
GGCAGGGGTT GTCTTTCCTT TACCATGCCT ACCATGCCTT ATAGTGTTAA TAAATTAACC    300
TACCCAGAAA TGTTTCTCGA G                                                                    321
```

(2) INFORMATION FOR SEQ ID NO:694:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:694:

GCGATTGAAT TCTAGACCTG CCTCAATCCC CTCCTACTT GCTTTTCTT AGCATATAAA	60
AGTCCACAAG TTTTACTCAT CTTTTAAAA AACGAAAACA TCCTTAGACC GTGTCCTCCA	120
TTAGTTGCTA TCCTGCCTTC TTCTCTCAGC TGAGCTGTCT GAAACATGCT AACATGCTTA	180
TACAATACTT GCTGTCCTGC CTTCTGCTCT CAGCTGAGCT CTCTGAAACA TGCTAACATG	240
CTTATACAAT ACTTGCTGTC CTGCCTTCTC CTCTCAGCTG AGCTCTCTGG AACATGCTTT	300
TTATACAATA CTTGCTGTCC TGCCTTCTTC TCTCAGCTGA GCTCTCTGGA ACTCGAG	357

(2) INFORMATION FOR SEQ ID NO:695:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 225 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:695:

GAATTCGGCC AAAGAGGCCT ATGGGTTTTT AAAAATTTTG TTTTATTTT TTCCTTTGAT	60
GTGCAGAGGC TGTTTACTTT GATGCAGTCT CACTTGTTA TATTTTATTT TGTTGCTGGC	120
CTAGGCTCTT TTGGCCGAAT TCGGCCAAG AGGCCTAGTC GGGTGTGGCA GTGCCATTCT	180
GCAGTCCAG CCACCGGGA GACCGAAGCG GGAGGATCAC TCGAG	225

(2) INFORMATION FOR SEQ ID NO:696:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 314 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:696:

GAATTCGGCC AAAGAGGCCT ATCCGTTCT GTTGCAGCTG GCGGTGCTCG GCGGGCGCT	60
GGCGGCCGCA GCCCTCGTAC TGATTCCAT CGTTGCATT ACACCTGCTA CAAAAATGCC	120
AGCACTCCAT CGACATGAAG AAGAGAAATT CTTCTTAAAT GCCAAAGGCC AGAAAGAAAC	180
TTACCCAGC ATGGGACTCA CCTACCAAAC AACTTCTGT CGTTGTGCCT TCAAACAATG	240
AAGAAAAACG GTTGCCTGTG ATGATGGATG AAGCTCTGAG CTATGTAGAG AAGAGACAGA	300
AACGAGACCT CGAG	314

(2) INFORMATION FOR SEQ ID NO:697:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 353 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:697:

```
GAATTCGGCC TTCATGGCCT ACAGAGTGTG GACGGCCAC TGGGTTGGTG GTGGTGGGTG      60
CCCGTCACAG GGCTGGAGGT GTGGCCGGCC CACTGGGTTG TGCTTTCTGC CGTACGTCCC      120
TTCCCATGAG GATGAGATGA CCCATCTGTT GCATCCCGGC TGCTGATAAA ACAAGACCTT      180
CGGAGCCAAG AAACAACACT GAGTTCCAGA TTTCGGAAGG TTCACGAGTG TTGCCGACAC      240
GCCCTCCCAA CTGCAGACAT CCTCCCTGGA GGACCTGCTG TGCTCACATG CCCCCCTGTC      300
CAGCGAGGAC GACACCTCCC CGGGCTGTGC AGCCCCCTCC CAGGCCCTC GAG              353
```

(2) INFORMATION FOR SEQ ID NO:698:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:698:

```
GAATTCGGCC TTCATGGCCT AGATTGACAG AGGTCAGTTG TCACTTCTTG CCTCTCTCCC      60
CTTCAGCAA CATGTATAAT CCTGTGAGTG TTTCTTCAGC ACCCTTCTCT GTTGTTTTACA      120
CTACTGCAAG AGCCTCCCTA AGTGGTCTGC CTGTTTCCAC CCTGTGTCTT TGAATTTTAG      180
TTTTCTCGCA AAAGCCAGAG AATGTTTTCA GAAGGTAGCT CTTGAGCAAC TTCCCACTTT      240
CTTGGAGGGG AGATCCAGCT TCCCCAACA GACCAGCAGG CCCCTGTGCG GCCTGGCTCC      300
TGTTCAACCCT ACCAGTCTTG GCTCAGGCTC ACGGCTGGAA TATGCCGAGC TCTTCTTGT      360
CCTGGGGCCT TTGCACTTGG CTTCCCTCTG TCCAAAATCA TCTTCCTGTA GCTTTGTGCT      420
TGCTTAGCTC ATCATCATAG CAGCTCGAG              449
```

(2) INFORMATION FOR SEQ ID NO:699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:699:

```
GAATTCGGCC TTCATGGCCT ACAGAGAACT GAGGAAAACC AACTACGTGG AGAATCTCAA      60
AGAAAAAGC GAGGGAGAAG CTTCCTGTA TGAAGATAGA ATAATAACAA GAGAGAAGGA      120
CATGAGGAGA GTGAGAGATG AGCCCGAGAA GGTGGTGAAG CAGTGGGACC ATAGTGAGGA      180
TGAGAAAGAG ACAGATGAGG ACGATGAGGC TTTGGGGGAA GCTCTGCAGA GCCCAGCAAG      240
CGGAAAGCAG AGTGTGGAAG CAGGAAAAGC CAGAAGCGAT TTGGGAGCAG TTGCCAAGGG      300
CCTGTCAGGA GAATTAGGCA CAAGATCAAG AGGGCTCGAG              340
```

(2) INFORMATION FOR SEQ ID NO:700:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:700:

GAATTCGGCC	TTCATGGCCT	AAGCCAAGCA	AGGCTGTACC	TTTAATTACT	GCTGCCCTCA	60
TTTGCACTCG	GCTGCCCTCA	TTATAGTGCT	ATTAGCAGAG	TGCAGGGGTC	CTCCTGCTGG	120
CCCATCGGGA	GTGGTGCCTG	CACAGTTGTG	GGGCCTTGCT	TTGGTGGTCT	TTGCTGCCTT	180
CTGGGCAAAA	TGAAGGATTT	GGAGTAGACA	GCAAGCAGGC	ATACATCCTG	GGCCAGAAGC	240
AGCCTGCGGA	GCTCATCGTG	GCTTGCCTTA	AATTGTTTCT	CAACAATAAA	GTTGTTGAAA	300
AACAATTTGT	GTTTCTTTC	TCCTTATTAA	AAACCCAAAA	TTATATTCAT	TATAGAAAAT	360
TAAAGAAGAT	AGCTCTCGAG					380

(2) INFORMATION FOR SEQ ID NO:701:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:701:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCC	TCAGCCTCCC	AAAGTGCTGG	60
GATTATAGGC	GTGAGCCACC	GCGCCCGACC	GAAAATCTAA	AGATATTGAA	AAGATACAAA	120
GGAGCACATT	ATGAACATTT	TTTTCGTATC	ACTGAGTATT	TTATAACTGC	ATCATTGATT	180
TTAAAGAAGAT	TCATGACTTT	GAAAACATAAT	ATTCTACAAA	GTAGCTTTTG	ATTTAACATG	240
AGATTTTATA	TATGTGCTTA	TCTTGTTTCT	CTATGAAACC	CCATTGAAAT	AAGAAAATGT	300
AAACACCAGC	CAACTCGAG					319

(2) INFORMATION FOR SEQ ID NO:702:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 549 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:702:

GAATTCGGCC	AAAGAGGCCT	AATAGTCAAG	ACCTTTGCAG	TTTTGATCAC	AGAAATATGA	60
AAGATTACAC	AGCTACAGCT	ATATGAATGA	TAAAAGTGAC	AGCTATGGAT	TTTTAAAGTT	120
ATAAGTTGCT	ATACTACATA	TATGTAATGT	GTGTGTGTAT	AGTGTGTAGG	TATATATATT	180
TATATTTTATA	CACACACTAT	ACATGTATTT	TAAAATATTG	AAAATCCAGA	ATTATTTTAT	240
GGTAAAAAATT	ACTAAAAATTG	ACTTCACATG	CTGAATGAAG	AGAGCCTGAG	TAGACCAACA	300
AACAAATGAA	AAATTAAGAC	GGTTAGAAGA	TACGCTTTCT	AAAAGAATAC	ATTTAGAATC	360
TAACCTTTAAA	AAAAAAAAT	CCTACTCTCC	TGAGCCAGAG	TGGTCTCAGA	GAGACTCCGA	420
GAACCTAATT	TTTACAAGT	AAAATCTTTG	AAGAATTGGT	AATTGCTAAA	TTTTTCCAAC	480
ATACTATTCT	ACAAGACTAA	CCTAAAACTG	ATTATAAGAA	CTAGGTGAGG	AGGGCCGGCA	540
AAACTCGAG						549

(2) INFORMATION FOR SEQ ID NO:703:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 758 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:703:

```
GAATTCGGCC AAAGAGGCCT ATCGAGCCAC TGCACCTGGC CGATGTGTTT TGTGTTGAAAT    60
CTTACTCAAA AGTATTGAA GAGTTGTGTA TAGTTGTATG GATATGCTG TAGTAAACAG    120
AAACAAATTG CTCAGTTTC TCTTTACTTA TTTTCTAGGT TACAGTACCT TTACCAGCAT    180
CCCAGCTTTC CTGCTTAAT TTTGGATCTA CAGGGCAACC TCTAATTGCT TTGCCTCAGA    240
CTCTTCAGCC CCCATTACAG CATACCACTC CCCAAGCACA GGCTCAGAGT CTGAGTCGTC    300
CTGCACAAGT AAGCCAGCCT TTCAGAGGAT TAATTCCTGC TGGAACACAG CATAGCATGA    360
TTGCAACCAC CGGAAAAGTA AGTAAAGAGA CATTTCACAC GGTTATTTGA GAATTTAAGG    420
TAGTGTGTTT AGATATATGC ATCTGTGTTA TCTAAAAAAC TAAATGCGT CAGTTTTTAC    480
CACCTGCAA AAATCTCAA CCCCAGTATA TTTACATTTT ATCTATTTAC TTTAATGTG    540
TTTGGCCCCA TCTAGTTTTT ACCTAATAAC AAAGAATTCA CAAATTTATT GGAAGAATTG    600
GATTTATAGT GTCTCTTGG CTTATTTAAT TATAAGTCTG TTTGGTCAGG TAATTCATA    660
ATACTTGAAG CCTAACTATA GGAGTTTGT ACTAAGGTTT TTTGCCCTTT CCTAGATTAC    720
GTCTTCACGT ATAGGACATG TAAACACAGC AACTCGAG    758
```

(2) INFORMATION FOR SEQ ID NO:704:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 663 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:704:

```
GAATTCGGCC AAAGAGGCCT AAGATGGCCT TCCCATGTTA TGGCTACATG GCTGTGATAA    60
CAAGTAGAGT TATGTGCTG CGCTCTAAAC TCACTGAGTC TTGCAGGATG TAAACATCCT    120
AGCTCAGCCT ATCCTTGACC AAAGCACANT CATGCTCCTT ACAAACCTCA ACCAGCCTGC    180
ACACTGGGAG GAGCGCGTGC TGGGCTAGAG CCACAGAATT TTGTACCGTT GGCAGCAGGG    240
AGGAGCCTGG CCCCTCCTTT CCTAGGTAGA ATCTGGAATT CAATCTGTGA GGTGGGAAGC    300
ATATACTAGG AGGACTTTCA CTCTGCTGAG TCCCTGTTCC CCCTCCCTTT TTTTTCCTTT    360
TTGCCCAATA AACCCCTTTA TTCTCACACT TCAAATGTGC TGTGAGACTA ATCTTTTGTG    420
GCCATGTGAC ATGGACCCTG TCTGTAGCTG AAATAAGAA AAAGCCCCTC CCGCACAGTC    480
TGATGTTTCC TCAGTCAGAC ACTGCAAGCT GTGATGTTGG GGTGAGTACA GGATATTTGG    540
CAATATTTGC AGACAGTTTT GGCTGTCAGA GAGGAAGATG CTGTATGCAG ACACACTTGA    600
CAGCAATAAC TTAAGCCAC CCTGAGACTG ACTCTGCATG GTGATGCACC TGAAGGCCTC    660
GAG
```

(2) INFORMATION FOR SEQ ID NO:705:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 334 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:705:

```
GAATTCGGCC TTCATGGCCT AGAGCGATGT CAAGTGATCT GCCCGCCTCA GCTCCCCAAA    60
```

```

GTGGTGGAAT TACAGGCGTA AGCCACTGCG CCTGGCCCCA AGTGTCCATT TTTTAATTTA    120
GTAATTCTAA CCTAGGTATT TTTCTGCAG TACAAAATGA GGATAAAGCT TTACATGAAA    180
ACATGTTGTT CCTATTATGT TTATTGCAGC AAAAACACAA CCTAAAAACC CAATCTGAGC    240
AGGTTTTAAC TAAATACTAA TAATTCTGAC ACTAGAACGT TATGTAGCTA ACAAAAATAT    300
GTCGTAAAAA TAATCATGTA GAACTGGCT CGAG                                334

```

(2) INFORMATION FOR SEQ ID NO:706:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:706:

```

GAATTCGGCC TTCATGGCCT ACCGAGCTTC AGAGCATCAG CAGTGTTCCT CCTTCACTGT    60
GACGCTTGTC CTCACTTCCC AGGTGAGGAG TCTAAGAAAA CAGCCTTTCC ATCAGCCCCCT    120
GTCGTGACAG ACCCTCCAGT GGGATGGTAG TGGCTGCCTC ACCCATTTAC AGGGCAACCC    180
AGTTTGTGCT CTTCTGCCTT GAAATTTGTT CCTCCCAGAA ACTGTCCCTC ACAAGGCATG    240
AACAATCAAT AGAAGATATA CGTGGTCTTC CCAGCACTAC AGETGCAGAA TGAGCTGTGG    300
AGTGCCCCGT CCGGAGTCCT GAACAGCTTC AAACCTTTTC CCTTTAGAAA TGCCTAACAC    360
GCCCTCGAG                                369

```

(2) INFORMATION FOR SEQ ID NO:707:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 365 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:707:

```

GAATTCGGCC TTCATGGCCT AGGCATCCTT GGTGCGGCAT CCTTGGTGCA TTATATCAGG    60
AGGCAAATGA TGTGGGTTTG TCCCATGTGT TGTAATGGTA ACATTGGTTG CTTGGTTAAG    120
GTGAAGGGTG CCAAGCTTCT CCACTGTAAA GTTCCTATTT TTTTCTCTGT AATTAATAAG    180
TAATTTGTAT GATACTTTGA GATAACAAAG TAGACTGTTC ATCAAACCTT CATCAATGAA    240
TTTAACATCC AAAGACGCCT CAAGAATGAT CATCAAAAGC AGCCTACTAA TGACTGTCAT    300
TTACCATTTA ATACATTTCA AACAGTGCAC GTGCTCTGTG ACATATTCTG GGAAGGAATC    360
TCGAG                                365

```

(2) INFORMATION FOR SEQ ID NO:708:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:708:

```

GAATTCGGCC TTCATGGCCT ACACAAAGCT TCTGGAGGAC AAACGGGAGC AGTTGAAGAA    60

```

```

GAGCAAAGAG CATGAGAAGC TGATGGAGGG AGAACTTGAA GCTTTGCGGC AGGAATTTAA 120
AAAGAAAGAC AAGACGTTGA AAGAGAATTC CAGAAAGTTG GAGGAAGAAA ATGAGAATCT 180
CCGAGCAGAG CTACAGTGTT GTTCTACACA ACTGGAATCC TCTCTCAACA AATACAACAC 240
CAGCCAGCAA GTCATCCAAG ACTTGAATAA AGAGATAGCC CTTCAGAAGG AGTCCTTAAT 300
GAGCCTGCAG GCCCAGCTGG ACAAAGCTCT GCAGAAGGAG AAGCACTATC TCCAGACTAC 360
CATCACCAAA GAAGCCTATG ATGCATTATC CCGGAAGTCA GCCGCCTGCC AGGATGACCT 420
GACACAAGCC CTCGAG 436

```

(2) INFORMATION FOR SEQ ID NO:709:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:709:

```

GCTGCTCTAT ATCTTAGAGA AAATAAAGA ACCACATGTT GCTTCCCTGC CTGCAAGCTC 60
TTCTGAATTC ATCACCATTG ATGTTCTTTC CTTTCAGGGGA AATGAAGGCA GATTGTTCTG 120
TTGGTGCTCA CAGATCTCTT TCTGTTCTGA TACCCTCCTC TTCCTCTCCT GCTTCTTTCC 180
CTTCATCATG TGCTCCTATA CAAGTCTCTC CCAACTTTAA AACAAAAACA AACCTTCCC 240
TAAATCTTGT GTTTGTTCCA GCCATTAGAC TGTATCGTCC TTGCCATCCA CGTTATTGGA 300
AGAAGGCCAG CTCACCTCTA CTCCCTTTCT GCCCTTTCCC TCTTAATCTG CTGTCCTCTG 360
ATTCTGCCC CCACAAATC GAG 383

```

(2) INFORMATION FOR SEQ ID NO:710:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:710:

```

GAATTCGGCC TTCATGGCCT AGGGGCCTGA AGATCTTCGG GTATTTGGCT CCCAGAATCT 60
GACCACAGTG AAGCTAAAAG GGGTGGGTGA CAGCTTCAAG AAGTATCCTG ACTACGAGTC 120
CAAGGGCATC AAGGCTCACT TCAACCTGGA TGAGAGTGGC GTGCTCAGTC TAGACAGGGT 180
GGAGTCTGTA TTTGAGACAC TGGTAGAGGA CAGCGCAGAA GAGGAATCTA CTCTACCAA 240
ACTTGGCAAC ACCATTTCCA GCCTGTTTGG AGGCGGTACC ACACCAGATG CCAAGGAGAA 300
TGGTACTGAT ACTGTCCAGG AGGAAGAGGA GAGCCCTGCA GAGGGGAGCA AGGACGAGCC 360
TGGGGAGCAG GTGGAGCTCA AGGAGGAAGC TGAGGCCCCA GTGGAGGATG GCTCTCAGCC 420
CCCACCCCT GAACCTAAGG GAGATGCAAC CCCTGAGGGA GAAAAGGCCA CAGAAAAAGA 480
AAATGGGGAA CTCGAG 496

```

(2) INFORMATION FOR SEQ ID NO:711:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:711:

GAATTCGGCC	TTCATGGCCT	AGTATGGAAG	GTGGAACATA	AACTGAAATG	ATCAGTTCAC	60
ATATTTGTAA	ACTGCGTATT	TTATATCAGT	CGCTGGATTA	GGCCCTAGA	GACAGTGGTG	120
GCTAAGTGAT	AAAGTCTTTG	CGCTTGTGGC	ATTTTATAGT	GTAAGTGGAA	GACAGAAAGC	180
AAACAAGTAG	AGAATCATAT	ATGTAATGTG	ACCTCAGGTC	CAGCTAAGCG	CCAGACAGAA	240
GAAAAAAGTA	AGGTGAAGGT	AGAGGGGTTG	GAGCAGGAGG	AAGGTGTTAT	TTAGGTAAA	300
GTGGCCAGGG	AAGGCCTTTT	GAAGAATTGA	TATCGATTCC	AAAATGATGA	GAAGGTGCAA	360
TTGTGCCACC	ATGGAGGAGA	AGAGCTTTCT	AGGCAGAGGG	CAGGTGCAAA	GATGGTAGGA	420
ACAAACACGG	CTTGTGAAA	GAACAGCAAT	GTTTGAGGAA	TGAGCCAGAC	TCGAG	475

(2) INFORMATION FOR SEQ ID NO:712:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 608 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:712:

GAATTCGGCC	TTCATGGCCT	AATTTTGCAT	AAAACCTCAT	CAATCTCTGC	CAATCACTGA	60
GCCCAAACC	ATTTTCACTT	TGTTTtaggt	ATTTATAATA	ACAGCACTCC	CACTTCTCAT	120
GATCAATTT	CATCTTCAGC	GGTTCAGGCT	GCTTTAATAA	AGTTCCATAA	CCTGAGTGGC	180
TTTTAAATAA	CGGAATGCAC	ATCTCACAGT	TCTGGAGGCT	GGAAGTCCAA	CAGCAGAGTG	240
CCAGCATAAT	TGGGTTCTGG	TGAGAGAGCT	CTCTTGGGTT	TCAGACTGCT	GCCTTCTCAA	300
TGCAGCTTCA	CATGGTGGAC	AGAAAGAGCT	CTCAAGAGTC	ATTTTAAAGG	GCACCAATCT	360
AATTTATGAA	GCCTCCACCA	TAATAAGCTA	ATTACTTCCC	AAAGTGCTGA	GATTACAGCT	420
GTAGCCACC	GTACCTGCCT	GGGAATTTT	TTAAAGCTCA	AATTGGATAA	GAGGGTTATA	480
GGAATATATT	CATCTATCAT	ATAGAAAAGA	ATATGTGCTC	AGTCCCAGGA	AATAGAAAAAT	540
ATATTACCTT	ATTTATACTG	TTTTAATTAA	TGCTTTTAA	AATCTGATTA	ACTCTGGGAG	600
AGCTCGAG						608

(2) INFORMATION FOR SEQ ID NO:713:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:713:

GAATTCGGCC	TTCTTGGCCT	AGTGCACTCC	TGTAATCCCA	GCTACTCGGG	AGGCTGAGGC	60
AGGAGAATCA	CTTGAACCCA	GGAGGTGGAG	GTTGCAGTGA	CCCAAGATCA	TGCCACTGCA	120
CTCCAGCCTG	GGTGACAGAG	CGAGAACGTC	TTTAAAAAAA	TTAAAAAAA	AAAAAAAAGA	180
TTGCACAAAT	CAGACAGTGA	CCCAGAGCTC	AGCCTTGAGG	AAAGTCAGTG	TTGGGGAGGG	240
GAGGGCAAAG	AAGCAAGTAA	AGGTTTAGCA	GACATGGCAC	CTCAGTCTGG	ACTTGAAGGA	300
GGGCTAGGCA	CAAAGGAAGG	GGAACATGTC	AGATGAGAAA	CACGTGAAGG	TTCAGCCAGA	360
TGAGCAAGGA	AGGTTGGTTA	GAAAGAGGAG	CTGCTGGTGT	GGCTCCTGTG	AACACAGGTA	420
GATAGGGCAC	GATAGAGTCA	GGCAGTTAGA	AGCCAAGCTG	AGGAATCGAC	ACTTGATTCC	480
ATAGGTAAGT	AGGGGAACCT	GAGGATGTTT	AATCAGAAAT	GAGATCTCGA	G	531

(2) INFORMATION FOR SEQ ID NO:714:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 499 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:714:

```
GAATTCGGCC TTCATGGCCT AATTTATCCC ATCCTTATCC CATCCTTATA AGGAATAATG      60
TATTGAATAA AGATTGTATC AGTATTTGTA ATTCAATAAA CCAGAACTTG TGGAAATAAA      120
TATGTAGGAG ACATAAATAT GGTGTCCTCA AATTGAATTA TGTGGGAAAA AAGTGGGGTG      180
GAGTTAAAGT CCAAGCCAAT AAAGTTGTAA CATTAAAGAA AGACAGGTAT GGGATGCAAG      240
GTGCAAAGAA AAGGTCATCA TATCTCATA TGGGGTGAGA TAGAAGACTT CCTGAAGTAG      300
GCGATGCCTA TATTGAATCT ATAAGGACAA ACTGGCATCA ATATGTCAGG GAAGACAGGT      360
TGAAGGTGGT CCTGCCAGAG AAAGGAGCAA GGATAAAGGC AAGGAAGCAT GTAACGTAAT      420
TGTTTGTGGA GAAACCTCAA ATCGGCTGAG GAAAAACGAC TCAGGTATGT AGTAGGGCAC      480
AGTATAAGTA GGTCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:715:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 430 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:715:

```
GAATTCGGCT TCATGGCCTA GAGATTAAAT GTTCCCTTAC CTTGCTGGAG GAACATCAAT      60
GTTGGAGGAA ACAACTTTTC TTTTGTGCTC AAGGAGACAG ATGGAGCGAG TGTTTTCTTT      120
TTCATGGTCA AGGATCCGGC TGGCTTTTTT GGTGTCTGCT GTTTTCACAT CTTCCTCCAT      180
GGCCAAGGAA AACACGTGTT GATGAGACAT TTTTITACCA CAGTCACGTT TTAAGTCCTC      240
TGA CTGAAAT GTGAAGGTCA TTTCCCGCTT AATGCTCCCC ACCTGTGAAA TGAAACACAG      300
AAATTCTTAC TCACATAAAA CATCACCTTT GTACGACTAC TGCAGATGGC GGTGAGGAGA      360
GATTACAGAC ACTGTCCTTC CTGTTTCTCT GAAAGATTGT ATAATTTTAA TAAGAAAAAT      420
GCAACTCGAG
```

(2) INFORMATION FOR SEQ ID NO:716:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 471 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:716:

```
GAATTCGGCC TTCATGGCCT AGACCTTCTG GGTGAACGAG GGCAAGCAG CCAAGTCCG      60
CTGTACGTG ATGGGCAAGC CCGAGCCCGA GATCGAATGG CACTGGGAGG GCCGCCCGCT      120
GCTCCCGGAC CGCCGCGGCC TCATGTACCG CGACCCGAC GCGCGCTTCG TGCTCAAGGT      180
GCTCTACTGC CAGGCCAAGG ATCGTGGGCT CTACGTCTGC GCCGCGGCA ACTCGGCGGG      240
CCAGACGCTC AGTGCCGTGC AGCTGCACGT GAAAGAGCCC CGCCTCCGGT TCACACGGCC      300
CCTGCAGGAC GTGGAGGGCC GTGAGCACGG GATTGCCGTG CTGGAATGTA AAGTACCCAA      360
```

CTCCCGCATC CCCACGGCCT GGTTCCTGA GGACCAGCGG CTGCTGCCCT GCCGCAAGTA 420
CGAGCAGATC GAAGAGGGCA CTGTCCGGCG CCTCATCATC ACAGGCTCGA G 471

(2) INFORMATION FOR SEQ ID NO:717:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:717:

GAATTCGGCC TTCATGGCCT AGCCACTCTT AGCAACACAG ATTTTCTTCC AAATTATGCC 60
TTGAAGCTGC TCCCGGAGCC ACCCGTCTCAT CAGCACCCCTG CTCCTGTGGT CCTTCTCGTG 120
AAAGGCAGAG GGGAGATGCC TGTGCCCCG AGTCTTCTCT GCAGCTGCCG TGGGAACAGG 180
CACCTTCCCG GCTGCTGGGG ACACAAGGAG GGGGAGTCAC CGTGGCTTGC TCACTTTCCA 240
GATCAGCCAA CTGCAGAAC TTTGTTGTTG TTTAGATCCC ACGTCTGACG GTTTAGAACA 300
GCTTTTATAA CATGGTTAAA CATGTTTACA AAGCAAGGGA GACATCTCTT ACCTTGACAA 360
CACGAGGCTC CCACAGACCG CCTCCCCCA GCTCGAG 397

(2) INFORMATION FOR SEQ ID NO:718:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 539 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:718:

GAATTCGGCC TTCATGGCCT AGAAGGAAAG AAATTTTATG TGAGAGAGCA TCTGTATGG 60
CAAAATCTTG TCCTAAAGTA GAATGACTAG GAAAGAGCAA AATATAGGAC AAGTCAGAAA 120
GTCATAAGAT GGGAAAGAAA AACTTACAAC TGCTAGATCT TCTCCTGTCT AGAAGTGTG 180
TGTGTGTGAT GCTTATATGA AGGTACTCTA ATTAATTGGA TTAAGAGAAA ATGAAACCCC 240
ATCTCTACTA AAAATACAGA ATTAGCCGGG TGTAAGTACA CATGCCTGTA GTCGCAGCTA 300
CTCAGCAGGC TGAGACAGGA AGATAACTTT AACCCAGGAG TTGGAGGCTG CAGTGAGCCA 360
AGATCGCGCC ACTGCACTCT AGCCTGGGAG AGACAGAGCG AGACTCCGTC TCAAAAATGA 420
AAAAGTAGAG CCTGGTAGAG TGAAGCCACT TGCAGGAGTC GTTTAGTTAG GGCTGTGTTG 480
CCTTACAGTG CTGGTGTCTT CACAGATGAT AATAGTAATA AAAAACACCA CAACTCGAG 539

(2) INFORMATION FOR SEQ ID NO:719:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:719:

GAATTCGGCC TTCATGGCCT AGGCAGTGA TAATTGTCCT CTGGAGGAAC CATCTGTGAC 60
ACATTCTACA TGGTTCCTTA GAGGGTCCCC AAGTGGGATT GAGTCCCTCT TGTTCCTAGC 120


```

AGTAAGCAGT TCTGTTATAC ACTCTTTATA TGCTTTTCCT CCTTCCTCT CTCAGTCTCT      180
CTGATCCTTC CACCTGTGCT CTGGGTTTAC CTCTCAAGTA AACCACCTGC ACACAAGTCC      240
CTGTCTCAGG CTCCATTTGG GGAACCAAAA CTAAGACACC ACCTCAAAAC ACAGAATTTC      300
ACGAGGCTCC AAATGCCTCA GAAAAGTAAT GTAAATATAA AATGACCAAT TTTTGAAGT      360
ATATTAATCC TAGTTATTTA ACTCGAG                                         387

```

(2) INFORMATION FOR SEQ ID NO:720:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 239 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:720:

```

CCCGTGATA GTTTGCAAAAT ATTTTCTCCT CTTCTGTAGG CTGTTTACTC TTGTTGATAG      60
TTTCTTTTGC CATGCACAAG CTTTTTGGTT TAATTAGATC CCATTGTGCA ATTTTGTCTT      120
TTGTTGCAAT TGTTTTTGGC GTCTTCATCA CGATATCTTT GCCAGTTCCT ATGTTCAAAA      180
TGGTATTACC TAGGTTGCCT TCCAGAGTTT TTATAGTTT GGGTTTTTAT TTAATCGAG      239

```

(2) INFORMATION FOR SEQ ID NO:721:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 323 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:721:

```

CTCGAGCACT ACCCTAGACG GTCTCATCAC TATACTGGCT CCTCCTTACC CCCGTAAATC      60
TCCCAGGTAC ACTTCCTGAT CACCCTCCGG ATACCTCATC CCTATCTATT CCTTTTATAA      120
ATAATTCCCT GCTCCTCCTT CTCACCCACA ATCCACTCGC AGTTCAAGGC CTCCTGCGCA      180
TCGACTCCAC TGTCTGTGAG TGCTTCCCAA TATGCCCCAG GACCCCTCCT GGTGTCACGC      240
TCTGTATCCT GACACCCCTT GTAGACGAGT CCCGAAATTC CCGCCCCGTC CCTGGAGCTC      300
CCTAGGCCAT GAAGGCCGAA TTC                                              323

```

(2) INFORMATION FOR SEQ ID NO:722:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 275 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:722:

```

GAATTCGGCC TTCATGGCCT AGGCCTGTGG AGCCCCAGCT CTGGGTCCCT AGCCCGGGTC      60
CAGGCAGCCA GGCTCCCTCC TGAGCTGAGA AACGGAACCT CGCGAACCAC TGGTGGCACA      120
TCCTTCTCCT CCCCCGCCCC TGATCACCCG CCCCCGGATC AGAAATATAT CTATATTCTC      180
GACTAAAGTC TCATCAGGAA ATATTTCTG TCTTTTATTT TAAGCATCAA ATTGTTTATG      240
TTGATTTAAA AAGGAAAAAA TACAGACGAC TCGAG                                         275

```

(2) INFORMATION FOR SEQ ID NO:723:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:723:

```

GAATTCGGCC TTCATGGCCT AAGAAGCAAC AATCATATTA GCTGGGGGAG GAGGATAGTT      60
TGGTATTTTT GTAGTTTGCA CAGTGACCTT TTAAAAATC TGGTTAGGCA AAAATAGTGT      120
GATCTTGTTT GTTGTCTCAC TTCATTATGA TCACAGAATG ACCTGGTATG ATGTTAGTGT      180
TTTATGAGAG TGTATGTTT TAACAGGGGA ACACCGCAGT CAATTCCTAA CAACACTAAA      240
GTGTCAGTTC TGTCGTGAC ACCAAGGGCT GTTTTCTTT TTCTCATATA ATGTTGAGGC      300
AACCAGGAAG ACTCGAG                                     317

```

(2) INFORMATION FOR SEQ ID NO:724:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:724:

```

GGCCTCAGCA GGTGTGAAGC GTGTGCTTTA GTTCGTGGG AGGCCTGGCA TCCCCGAGAG      60
GGAGGGGAAA GGTAACCACT CCTTGTGGA GGTCGCCAGG GTCATTGTCG TGGATTGCA      120
CAGTCGGCTG GCGGGTGCAA TGGCGGAAAG AAAAGGAACA GCCAAAGTGG ACTTTTGGAA      180
GAAGATTGAG AAAGAAATCC AACAGAAATG GGATACTGAG AGAGTGTTTG AGGTCAATGC      240
ATCTAATTTA GAGAAAGCAG ACTCGAG                                     267

```

(2) INFORMATION FOR SEQ ID NO:725:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:725:

```

GAATTCGGCC TTCATGGCCT AAGTCAGTGG TAAGCCGCAG CAGTTTCCTG CCACTCGTAA      60
TATGGCAATT AAAAATTTTA AATTGTGGC TGCTTGGGGT CTGGGAGGTG ACCTGCTCCT      120
CAGCAAATTT TGA CTGATAA ATTAATGCCT GGGTCTTCAG CCTGGTTCTT TGCTGGCCAG      180
TGTGACAACA GTCTGTCACG TCTCTGGGGG CACATTATAA TTAACAGATG TAATCTTTCT      240
CCGGTTCAGG GTCATCTGTG AATCAGGGGT ACTGCCCCAG TAGAACTAGG AACATCCAGC      300
AAAAGACTGT TTTCAAATA TACAATTAAG TGAAAAAAGC ATGAAGAAGT CGAG          354

```

(2) INFORMATION FOR SEQ ID NO:726:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 154 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:726:

GAATTCGGCC AAAGAGGCCT AGAGGTTGAC CTGAAAAACA ATGAAACACA TGAACACACT	60
TCCGATTTTC TCCTCGCTGA TTAGCTTCCT GCCTGCTGTC AGTGCTGGAC GAAGTGCTAT	120
AACTACTTTA TGTAACATTA CAGAACAGCT CGAG	154

(2) INFORMATION FOR SEQ ID NO:727:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 338 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:727:

GAATTCGGCC TTCATGGCCT AGTGGGAAGA TGTGGATGAT GAGAAGGGAG ATAGCAATGA	60
TGACTATGAC TCTGCAGGCC TATTGTCAGA TGAAGACTGT A'GTCTGTGC CCGGAAAAAC	120
TCACAGAGCT ATAGCAGATC ACTTGTCTG GAGTGAGGAA ACAAAGAGTC GCTTCACGGA	180
GTATTCGATG ACTTCCTCAG TCATGAGGAG AAATGAACAG CTGACCCCTAC ATGATGAGAG	240
GTTTGAGAAG TTTTATGAGC AATATGATGA TGATGAAATT GGAGCTCTGG ATAATGCAGA	300
ATTGGAAGGT TCTATTCAAG TAGACAGCAC GACTCGAG	338

(2) INFORMATION FOR SEQ ID NO:728:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 433 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:728:

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGAACTCTC CCAGAGAAAC CAGGCAGATA	60
CTGCTCCACA CCGGTGAGCT GCTTCTCACC TGGGTAGTCT AGGGTGGTTT GCTCCAGAAT	120
TGTATTTCTG CTTTTTCTTT TTTTAACTTG GCAGTGGTTA ACCATTCCCT GGAGCAGCAC	180
CAGGTAAGTC AGCTTGATC AGAGTCATCT GCTTTACCTG ACATGAGCAC ACGTTGTCAT	240
ATATTTGCAC ATGCAGATAT CATATGTTAA ACAATATCAC ATTGTTGAAG AAAATTACAC	300
TGGAAAGCGT AAAATATAGT TTGGATGCCA TATTGAGTGT AACTTAATCC ACCCGATTCA	360
GAACTTTGT AGAGTGCCTC GGAGTTCCTA TTTGGAAATA TCAGTTAGCA GTTTTAGTCA	420
GTAGAGACTC GAG	433

(2) INFORMATION FOR SEQ ID NO:729:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 315 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:729:

```
GAATTCGGCC TTCATGGCCT AACAAAGAAAC ACCAAGTACC TCGACCTCAA GAATTCACAA      60
GAGATGCTCC GCTACAAAGA GGTCTGTCTAC TACATGCTCT TTGCCCTGGC TGCCTACGGG      120
TGGCCCATGT ACCTGATGCG GAAGCCCGCC TCGGGCCTCT GCCAACTGGC TCGGTCCTGC      180
TCGTGTTGCC TGTGTCCTGC GAGGCCGCGG TTCGCCCTG GAGTCACCAT CGAGGAAGAC      240
AACTGCTGTG GCTGTAATGC CATTGCCATC CGGCGCCACT TCCTGGACGA GAACATGACT      300
GCGGTGGGAC TCGAG                                     315
```

(2) INFORMATION FOR SEQ ID NO:730:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:730:

```
GAGTTGTCTC TCTGAATTAA CTTTCTCACC AATAGCTCCT CTCTAAGATC AATAACTCTT      60
ATGTTTGAC TTTTTAGGCT ATTTTCTAGA TCTGTATGT GTGTCTTATT ATTTTATT      120
CTTTTGTCT CCTCTGTGAA TTTCAAATA GTCGAG                                     156
```

(2) INFORMATION FOR SEQ ID NO:731:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:731:

```
GAATTCGGCC TTCATGGCCT ACTTGAACCT AGATCTCACC CCCAGGATGT TGCGGAGGCT      60
GCTGGAGCGG CCTTGACGCG TGGCCCTGCT TGTGGGCTCC CAGCTGGCTG TCATGATGTA      120
CCTGTCACTG GGGGGCTTCC GAAGTCTCAG TGCCCTATTG GGCCGAGATC AGGGACCGAC      180
ATTTGACTAT TCTCACCTC GTGATGTCTA CAGTAACCTC GAG                                     223
```

(2) INFORMATION FOR SEQ ID NO:732:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:732:

```

GAATTCGGCC TTCATGGCCT AAATTATTGC AAAGTGTATA TTGGTTAAAA AAAAAAAGGA      60
GGAAGAGGCA GTTTTTCATG ACGGTTAAAA GTGCAGGATT TGGAGTCCCA TGGTCCTGGG      120
TGTGAATCCT GGCTGTGGCA CTAATATCT GTGTGACTGG CTGTGAACCT CTCGTGCCTC      180
ACTTTCTTCA TCTGCAAAAT GGGTAGTTGT ATAGCAAATG CACATAGAGA ACACTTAACA      240
CTTTGGCACA TTGGAAGCAC TCAGTAAATG TTAATTGTTA TTATTGTTGC TCTAAAGAGA      300
ATCCTCGAG                                     309

```

(2) INFORMATION FOR SEQ ID NO:733:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 275 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:733:

```

GAATTCGGCC TTCATGGCCT AGATTAAATC TAGACCTGCC TCAGCTCCAC TCCTTATGGT      60
TTGCCACCAT AACCTACAAC ATTTGTCCGT CCACCCACG TGTCTTCTTC CTTTGTGGCA      120
GGAATCTTCA TCTCTGCCTA CCAACCAATT GGTGAGGAGC ATGCACCCTA GTGTCTCAAT      180
CTCCAGACAT TAACATCCTG CCAAACAACC AGACCATCCA GGTTCCTTCA GTGACCCCTA      240
TCTCATCCTC TTCCACATGC AGTAGGCAGG TCTAG                                     275

```

(2) INFORMATION FOR SEQ ID NO:734:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:734:

```

GCAGATCAGA GGCACGTTTC CCACAACTGC GAAGAGGCGC TGAGGCAATT CTGCAAGAAG      60
ATTTTGGGGT TTTGGAAAAG AAGCTATGGA AAACGGAGGG GCAGGCACTC TGCAGATAAG      120
GCAAGTCCTG CTTTCTTTG TTTTGCTGGG AATGTCTCAG GCGGGCTCTG AAATGGGGAA      180
CTTTTGGTG ATGGAGGAAT TGCAGAGCGG GAGCTTTGTA GGAAATTGG CAAAGACCCT      240
GGGACTCGAG                                     250

```

(2) INFORMATION FOR SEQ ID NO:735:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 324 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:735:

```

GAATTCGGCC TTCATGGCCT ACACAGACTG GGCAATTAT AATGAACAGA AGTTTATTG      60
GCTCTTGGGT CCAGAGGCTA GGAAGTCCAA GAGCATGGT TCAAGCATCA GGTGAGGATC      120
ATCACCCCGT GGTAGAAGAT GGAAGGCAGA AGTGAGCGTG TGAGACAGAG AGGGAGAATT      180
GGACTCAACT CATCCTTTTA ATCAGGAACC CACTCTGTCA GTAACGAACC CATCCCCACA      240

```

ATAATGGCAT TAATCCATTC ATGAGGCCCC TACCTCTTTT TCTCCCCCG CCCCCGAGA 300
TGGAGTTTGT CTCTTGAGCT CGAG 324

(2) INFORMATION FOR SEQ ID NO:736:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 259 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:736:

GAATTCGGCC TTCATGGCCT AAACACATAC CAGATTCTTA GATTCATTG GTGAAGGAAG 60
CCTCTGAATT AAAACTTTTA AATATTCTG ATTTGCAACC AGACGAAAAA GAAGAAAAAT 120
GACAACTTTT TTGATGCAAC TTTGTGAAAT CATGGTGTTT CTGGTTTTTC TGGTCTGGTT 180
TTTGTGTGTG TTTTGTTTTG TTTTGCCACA GTTTAGTTCC TCACCTGATC TTTCTTGTGTA 240
TCCACTTCAG AGTCTCGAG 259

(2) INFORMATION FOR SEQ ID NO:737:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 409 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:737:

CTCGAGGCGG TGCCAGACAC GGGTCTCCTC CGACTGGGCG GTGCGTGGGA TGCCGCCAGC 60
GTCCAGGTAC TGCGTGATGC GGATGTAGGC GATGCAGGCT GACTCGTCGC CCATCAGGTG 120
GATGTGGGGA TTCAGGATGG TGGTGTGCAC GGGCTTGCTG TTCCGGGACC ACAGGTTTTT 180
AAAATAGAAT CGATGGAAGT CCAGGCCCTC AACCAGGTTC CCCAGGGCCT CAGGTTGCGAA 240
GGCTGTCATG CCAGGGTCGC ACATCTTCGT GTAGGACTCA AAATCTCCAT TGCTTATGGC 300
TTCAATCAGC TGCTCTGTCA CTTTATAAT TTCCTGTTC CGCACTTTGG TGTCTTCATC 360
CTCGATGGTG GTGTTGGTGC TCTCTGAGTA GGCCATGAAG GCCGAATTC 409

(2) INFORMATION FOR SEQ ID NO:738:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 466 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:738:

GAATTCGGCC TTCATGGCCT ACTTCCCCT CCTTCCTCC TTCCTTCCTC CCTCCCTCCT 60
CTCTCCTCTC TTTCTTCCTT CCTTGCCTCC TTCCATCCTT CCCTCCCTCT CTCTCTTTCT 120
TTCTTTCTTT CTCTCTCTCT CTCTTTCTTT CTTCTCTCT CTCTGTCTTT CTTTCTCTCT 180
TTCTTTCTTT CCATCTTCTT TTCTTTCTAT CTTTCTTACT TTTGATGTAG CTGTCACGAC 240
CTAATGAAAA TACTGGCATG AGTGATGCCA CCTTAGATT CTCACCTTC CTGTTCTGTG 300
CCTATTCACC AACATGAATT GGTTGTGGC TGTAAGTACT TGGTGGGTTA TTGCTCATAG 360

ATTCAGTTGC ATTTTGTCTG AGATAGTGCT GTTACCAAAA GCAGGGGTGC TGCTTGAAGA 420
 AGTAAACCTA ACTCTGAAAA ATAGAGACTC TCCAGAAACA CTCGAG 466

(2) INFORMATION FOR SEQ ID NO:739:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 367 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:739:

GAATTCGGCC TTCATGGCCT ACATTCTGCA AACTATTTTG TTATTAGCTT TTTCACCTAA 60
 AAATAGCCCT GCTTGCAAGC AGGCTCTGTG GTGCAATGGA TAGCGCATTG GACTTCTAGC 120
 CTAAATCAAG AGATTCAAAA ATAGCCCTGC TAAATATTTG CAATCTTTCC TACGCTCCTT 180
 TTCCCCCAA AGTGACTTTG GATATCCAGA GTTACCAAAT CTAGTATTTG AAGTCCTTAG 240
 GTTTGAGGGT TGAAAGTGAA AGGCAAGCTG TTTTAATGAA AATTCCTAAC TGAAGAGAGC 300
 GGAGACTTAA GATGCTTAAA TTTTGGTAC ACCTGAGCGG TATTTGTTTG CATGGCAGGA 360
 GCTCGAG 367

(2) INFORMATION FOR SEQ ID NO:740:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:740:

GTGATGGACA AAGACAGGGA AGGCCTCATC AGCAGGGATG AGATCACAGC CTACTTCATG 60
 AGAGCCAGCT CAATCTATTC CAAGCTGGGC CTGGGCTTTC CTCACAACTT CCAAGAGACC 120
 ACCTACCTGA AGCCCACTTT TTGTGACAAC TGTGCTGGAT TTCTCTGGGG AGTGATCAAA 180
 CAAGGATATC GATGTAAAGA CTGCGGGATG AACTGTCAACA AACAATGCAA AGATCTGGTT 240
 GTGTTTGAGT GTAAGAAGCT CGAG 264

(2) INFORMATION FOR SEQ ID NO:741:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 318 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:741:

GAATTCGGCC TCATGGCCTA CACGACCAGC ACCGCCACTG CCACCTCACA GCCTTTCCTC 60
 TTCGGGGCGC CCCAGGCCTC TGCTGCCAGC TTCACCCCGG CCATGGGCTC CATATTCCAG 120
 TTTGGCAAAC CTCCTGCCTT GCCCACAACC ACCACAGTCA CCACCTTCAG CCAGTCCCTG 180
 CCCACTGCCG TGCCAACGGC CACCAGCAGC AGCGCTGCCG ACTTTAGTGG TTTTGGCAGC 240
 ACCCTCGCCA CCTCGCCCC GGCCACCAGC AGCCAGCCCA TTCTGACGTT CAGTAACAGC 300
 AGCACCCCCG GCCTCGAG 318

(2) INFORMATION FOR SEQ ID NO:742:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:742:

```

GAATTCGGCC TTCATGGCCT AAGAAATGAA AAAGATTATT GAACTATGC CAATGACTGA      60
GAAAGTTGAA GAATTGCTGC GTGTCATAGG TCCATTTTAT GAAATGTGCG AGGACAAAAA      120
GAGTGGCAGG AGTTCTGATA TAACCTCAGT CCGACTGGAG AAAATCTCTA AATGTTTAGA      180
AGCTGAAAGC AGTGACAGTG GAGCCGAGTC TGAGGAAGAA GAGGCCCAAG AAGAAGTGAA      240
AGGAGCAGCC CTCGAG                                     256

```

(2) INFORMATION FOR SEQ ID NO:743:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:743:

```

GAATTCGGCC TTCATGGCCT ATGTTTTTAT AGCACCGATG GTACTGTTTT ATTTATTGCC      60
AATAGACCAC AACATTCACT TCTGTTTTTC CTCAAGGGAA CCGTATTGCG TTTTGGTTGA      120
AGGATTTATC TATTTGATAC TATCCAGAAT ATTGTGAAGC TATAATTTC TGGGTTATAT      180
TTTAGATGGG TTGTCTGCAT GGTGGTAAAA TAAGCTTTTT CCTCTCGCCT ACGTCCTTTG      240
GAAGATCTCC TGATCATACA TAACTAGGTA GGGCTTATTC TTGCTGCCCG AGCTTGGCAC      300
CCAGCTCTAG ACTGTTTCTT TGAGCATTAC TGCAGATTGG AGACGTGTGT GAGAGGAGCA      360
GCGCTCAGAA ATAGGGCTTG AGGCTCAAGC AGAAACTGAA GCTCTCATTC AAATGAAGAT      420
GCTCTCTCTA CCGCACGATC GGCAGTGAGA AAAGGAGGAT GAAAATCCTT CTCATCACAA      480
AGAGCTTGAA GGAACCCACG TCCCCAGATT AGCAACCCTA GAGTTCATCT GCTCAGGCCG      540
GGAAATGTGT AAGCTTCCTT GATCAACTCC AGGCCTCGAG                                     580

```

(2) INFORMATION FOR SEQ ID NO:744:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:744:

```

GAATTCGGCC TTCATGGCCT ACCCAGAGAC TCGCGGACGC TCACGATAAC CAAGGACGAC      60
CGCGAACCAA GGGCAAAATA ACATGGCAGC CAGACGAATT ACACAGGAGA CTTTGTATGC      120
TGTATTACAA GAAAAAGCCA AACGATATCA CATGGATGCC AGTGGTGAGG CTGTAAGCGA      180
AACTCTTCAG TTTAAAGCTC AAGATCTCTT AAGGGCAGTC CCAAGATCCA GAGCAGAGAT      240
GTATGATGAC GTCCACAGCG ATGGCAGATA CTCCCTCAGT GGATCTGTAG CTAAGCTTAG      300
AGATGCCGGA AGAGAAGGCC TGAGAAGTGA CGTATTTCCA GGGCCTTCCT TCAGATCAAG      360

```


CAACCCCTCT CGAG

374

(2) INFORMATION FOR SEQ ID NO:745:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 323 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:745:

```

GAATTCGGCC AAAGAGGCCT ATTGGTTTCC CTGCTTCCAT TCTTACTCCC CTACACTCTG      60
TTCTCCAAAA AATAACCATT GTGATCCTTT AAAATCCTGA CTCTCTCCTG CTCAGAGTCA      120
TCCAGTGGCT TCCCATATCA CGTAAAATGA AACCCCAATC GCTCCTTACT CTGGCCTGCA      180
GGGGCCTGTG TGATGGGCCT TCTCCAGCTT CGTTCTTCCT TTCCTTCTGT TCTCCCTCT      240
GCTTACCTAC TCCATCTCCA GGGCTTCTTT CCAGCTCAAG CCCTTTCCTG TTGAGAGCAT      300
TTGCTTCCC CAGGGCACTC GAG                                         323

```

(2) INFORMATION FOR SEQ ID NO:746:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 273 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:746:

```

GAGAACAGTG TTACCAAAGA AAAGGACATG TTCAATTTCA AACGAGCCCA GGAGGACATC      60
TCTAGACTTC GCAGGAAGCT GGAGACCACA AAGAAACCAG ACAATGTACC CAAGTGTGAT      120
GAGATTCTGA TGAAGAGAT TAAGGATTAC AAGGCACGCT TGACCTGTCC ATGCTGTAAC      180
ATGCGTAAAA AGGATGCTGT TCTTACTAAG TGTTTTCATG TCTTCTGCTT TGAGTGTGTG      240
AAGACACGCT ATGACACCCC CCCC GCGCTC GAG                                         273

```

(2) INFORMATION FOR SEQ ID NO:747:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 666 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:747:

```

GAAGATCTTC GCTGTCCTCT CTGCCTCTAT CACACCAAAT ACAAGCGCAA CATGATTGAC      60
CACATCGTGC TGCACCGAGA AGAGCGTGTT GTCCCCATTG AAGTTTGCCG GTCCAAACTG      120
TCCAAATACT TGCAGGGAGT AGTTTTCCGC TGTGATAAGT GTACCTTCAC CTGCTCCAGT      180
GATGAGAGCC TCCAGCAACA TATAGAAAAG CACAATGAAC TGAAACCTTA CAAATGCCAG      240
CTCTGCTACT ATGAGACCAA GCACACGGAG GAACTGGACA GCCACCTTCG GGATGAGCAT      300
AAGGTAAGCC GTAACCTTGA GCTGGTTGGA CGGGTTAACT TGGATCAGCT GGAACAGATG      360
AAGGAGAAAA TGGAGAGCTC CAGCAGCGAT GATGAGGACA AGGAAGAAGA AATGAACAGC      420
AAGGCTGAAG ACAGAGAGCT GATGAGATTT TCTGACCACG GGGCTGCTCT TAACACTGAG      480

```

```

AAGCGTTTTC CATGTGAATT TTGTGGACGG GCGTTTTCAC AGGGCTCTGA GTGGGAAAAGA      540
CATGTGCTGA GACACGGCAT GGCATTGAAT GACACCAAGC AGGTGAGCAG AGAAGAAATC      600
CACCCAAAAG AGATCATGGA GAACAGTGTT AAAATGCCCT CCATAGAGGA AAAGGAAAGT      660
CTCGAG                                         666

```

(2) INFORMATION FOR SEQ ID NO:748:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:748:

```

GAATTCGGCC AAAGAGGCCT AACAAACCGAA TATAGTACAC GACCTTCCTG CAGCAGTTCT      60
AAGCTACTGT CAAGTATGGA AAATCCCGGC AATTCTGTAC TTGTGTTATA CTGATGTGAT      120
GAAATTAGAC CTAATCACAG TGGAAGCTTT TAAGCCTATA CTTTCTACCA GAAGCTTGAA      180
GGGTTTGGTT AAGAATATTC CCCAAAGCAC TGAGATACTA AAGAAATTGA TGACAACNAA      240
TGAGATTCAG AGTAACATTT ATACATGATC TTAAACATTG TTTTGTAGTG TATATTACTT      300
GTCCATTCTT TTAAGGGGAG CAGCCTGCAC TCTTTTGTAG ATTACTTTTG GGGGATATAT      360
TTTGAGAAATG ATGAAACGG                                         379

```

(2) INFORMATION FOR SEQ ID NO:749:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:749:

```

GAATTCGGCC TTCATGGCCT AGGCGCAAGG CCGAGCGTTC CCAGCAGGGG GAGAAACCTT      60
TCACACCCCA GGCCCTTCAG GAACTGGGGC CTTGCCTTGC AGCCACATGG CCCCATCCCA      120
GTGCGGGAAG CCAGGTGAGC TCTGACCCTT GGGCCTGGGC CTCGCCCCCT CCCAACCAG      180
CCCTCGTCTC CCTCGACAGC GCCCCTGCTG TCTTCCCCAC CGCAGTCACC ACCACCCGAA      240
ATGCCACGTG GTCAGTGTGC ACTGCCCTGT TCATGTGCCT CTGCGGGGCA GGGCCTTCCT      300
GGTTTTGTTC ACTGCTGTAC CCAGATAGCC TCGAG                                         335

```

(2) INFORMATION FOR SEQ ID NO:750:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:750:

```

GCAAAGACCC AAGAACTGAA TATGCTCCGG GAACAGACCA CTGGGCTGGC AGCTGAGTTG      60
CAGCAGCAGC AGGCTGAGTA CGAGGACCTT ATGGGACAGA AAGATGACCT CAACTCCCAG      120
CTCCAGGAGT CATTACGGGC CAATAGTCGA CTGCTGGAAC AACTTCAAGA AATAGGGCAG      180

```

GAGAAGGAGC	AGTTGACCCA	GGAATTACAG	GAGGCTCGGA	AGAGTGCGGA	GAAGCGGAAG	240
GCCATGCTGG	ATGAGCTAGC	AATGGAAACG	CTGCAAGAGA	AGTCCCAGCA	CAAGGAAGAG	300
CTGGGAGCAG	TTCGTCTACG	GCATGAGAAG	GAGGTGCTGG	GGGTGCGTGC	CCGCTATGAG	360
CGTGAGCTCC	GAGAGCTGCA	TGAAGACAAG	AAGCGTCAGG	AGGAGGAGCT	CCGTGGGCAG	420
ATCCGGGAGG	AGAAGGCCCG	GACACGGGAG	CTGGAGACTC	TCCAGCAGAC	AGTGAAGAA	480
CTTCAAGCTC	AGGTACATTC	CATGGATGGA	GCCAAGGGCT	GGTTTGAACG	GCGCTTGAAG	540
GAAGCCGAGG	AATCCCTGCA	GCAGCAGCAG	CAGGAACAAG	AGGAAGCCCT	CAAGCAGTGT	600
CGGGAGCAGC	ACGCTGCCGA	GCTGAAGGGC	AAGAAGGAGG	CGCTCGAG		648

(2) INFORMATION FOR SEQ ID NO:751:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 266 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:751:

GGAAAGAATC	TAAAAGAAGA	GAAGCGACCG	GTGCTTTTAA	GGGTGTCTAA	TTTTCAAAG	60
AGACGTCTGG	GAGTATTTTG	CTCTGGGCGT	TTGGGTGAGC	AGGACCGGGG	CGTTGGAGGG	120
TGCGGCGGGC	TTGGGAGCAG	GGAAGGTTC	GAGTCCTAGG	GAGGCGGCAG	CGCTCGGCTA	180
TGCCCTCTGG	AGACTGGCGG	GGCTGCGGGG	CCGAGGGGAC	CCGCGAGGGA	GCCGCGCTGC	240
GGACGCGCTG	AGCGCGGGAG	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:752:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 288 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:752:

GAATTCGGCC	TTCATGGCCT	AGGATGTTTT	AAGGCTAGGC	CTGAGCGAGG	AGGAGGCAGG	60
GGAGACCTGG	CAGGTATTGA	AGTACCTGGG	AAGAAAGGCA	ATGGGGATGG	TGGTCTTGCT	120
CCAAGATGAT	AAGTGGAGGC	TGAGCGTCAC	TGGTACTGGG	GGCCATGATC	CCCAGGGCCA	180
CCCTGGCACC	AGGGTGACAG	GGATGCGGGG	CCTGAGCAGG	AAGAACAGAG	ATCTGCGGGC	240
TGCACCGACC	CATCCCTGCC	CCTAGGCTGA	AGAACGGCAT	CACTCGAG		288

(2) INFORMATION FOR SEQ ID NO:753:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 487 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:753:

GAATTCGGCC	TTCATGGCCT	ACTGAATTTG	CTTTTCTTGC	CTCTCTTTAG	TCACCTGTCA	60
CAGGAGGTTT	CTGCTCAGTA	ATGATATTGT	GAGTTAGGAT	AATAACTTTT	TTTTTTTGT	120

```

GCTTCAGATT TAGAAGAAAA GATCCTGTTT CCATTGAAA GGAAGTGTAA GCTTTTATCT 180
TTTAACCAAC TGAACAATAC ACCAAAAGCA GCCTAGGGAT GAGCATTCTT TTGAAAGCAA 240
TTAGGTTATT CACCTGGTAT TAAAACTATT TACTGTAAAA AAATCTGTGA CTTTCATGAAG 300
TTGATTTTAA AAGGCAGCAT CAAAACTGA AAAGGAAGGG AAAAAATAGG CAGCTTCTCT 360
GCACTTGTTT GGAGCTCCCC AAAACAGGAG CCATGGAGAA GTGGCATCAA GACCGGGCTG 420
CCCTTTCGAG AACACCCTGT GGCAGTTCAG AGACACGCTT TTCCTACACT GCATGCAGCC 480
GCTCGAG 487

```

(2) INFORMATION FOR SEQ ID NO:754:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:754:

```

GCTGGGTTTA GCGGATCCTC TTGCTTCAGC CTCCCAAGAA GCTGGAGCCA CAGGCATGCA 60
CCACCACGCC CAGTTAATTT TTGTATTTT TGTGGGACG GGGTCTCACT TTGTGCCCCA 120
GGCTTATCTG GAACTCCTGG TTTCAGGCAG TTCTCCTTCC TTAACCTCCC AAAGTGCTGA 180
GATTATAGGT GTGTGTGAGC TATCACACCT GGCCTAGAAA ATTATAAGAA AATATTAATC 240
ACATAATCTC ACTACCCATT GATGATTAA CATCTAGTAT ATACATATGT ATATATAATT 300
TTAAAAGTAG GGTATATTA TATAATTACT TCATTATTCT TGTTTTCCAC TTAATATACT 360
TAAGATATCT TTCAAAATCA CTAAATACAG GAACATAGTA TATCATCTT CAGTAGCCTC 420
ATTGTATAGC TAACCCCTC GAG 443

```

(2) INFORMATION FOR SEQ ID NO:755:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:755:

```

GAATTCGGCC TTCATGGCCT ATTGATTTC TGGGCTCAGG AGAGGATGGG GAAGGGGCTC 60
CAGACCCTCG GCGGTGCACT GTGGATGGGA GCCCCATGA GCTGGAAGC CGTCGGGTCA 120
AACTCCAAGG CATCTGGCT GACCTGCGGG ATGTGGATGG GCTGCCCCA AAAGTGACTG 180
GCCCCCTCC TGGCACACCC CAGCCCCGGC CACATGAAGG TTCCTTTGGC TTCTCCTCAG 240
ACGTCTTCAT CATGGACACT ATCGGGGGCG GGGAGGTGAG CTTGGGGGAC TTGGCAGATC 300
TCACCGTCAC CAACGACAAC GACCTCAGCT GCGATCTGTC TGACAGCAA GATGCTTTTA 360
AGAAGACGTG GAACCCCAAG TTCACCTGC GCTCGCACTA CGACGGCATT CGTTCCCTGG 420
CCTTCCACCA CAGCCAGTCG GCTCTGCTCA CCGCCTCCGA GGACGGCACG CTCAGCTCT 480
GGAACCTGCA GAAGGCGGTC ACGCCAAAG AGAATGCGGC GCTAGATGTG GAACCTATAC 540
ATGCTTTCCG GGCTCACAGG GGCCAGTGT TGGCTGGACT CGAG 584

```

(2) INFORMATION FOR SEQ ID NO:756:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:756:

```
GAAATTAAAA AAATAAAATC AAGTTCTTGG GTGGTGGGAA ATTGGCCTGT ATTTTCTT      60
CTCAGTGGAA TTTGCTGAGT AAAAAATTAT AGGCTCAAAA ACTGAGAACT TTGAAGATAT      120
TGCACCATAT TCTTTTGTG TTAGTGTG CTGATGAGAA GTCTGAGGTC AGTCTGTTGC      180
TTGCTCTTTC TAGGTAAACT GTGCTTTTTA TATTTTTC CCTCTAGAGG TTTGAGAAT      240
TTACTCCTTA TCCATGTTAT TCTTAAATTT CACCACATTC TCGAG                      285
```

(2) INFORMATION FOR SEQ ID NO:757:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:757:

```
GAATTCGGCC TTCATGGCCT AGAATGCTTT GAATCCATAT CTTTTCAGA AACATACATG      60
GAAATACAGA ACTACACCTG TAATTACAGA GGGCATATGA ACCCTAGTTT GATAAGCCTT      120
GCTTTAAAGG ATGCAGTGTG TTCTATTAAA TGTATTTAAT ACAATTGCAG AAATGGAAAA      180
TGTGGACCTC CATTAAACAA ATTTTGTAGT TCCTAATGAG ATAAACTTGG GACCAAACCG      240
ATCCTCTTGT TTTTAGTGCT CAAAAATAGT TTCATTTTTA GGTATTTATG CTTTAGTGGC      300
CTTCTCGAG                      310
```

(2) INFORMATION FOR SEQ ID NO:758:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:758:

```
GAATTCGGCC AAAGAGGCCT AAGAAAAGAA AGCAAGAACA GAAAACGAAG CCACAGGAAG      60
GGAAGTAGAC ATTGTATGCT TATGGTTTCT CATTATGAAG GTGCAGCTTG TAGGAGGTTT      120
GTACGGATGT GCTTTGAAGT TATGTATATT ACATATAACA GGAAAAAATA TAAAAATAAA      180
CAGTGCTGGT CTCGAG                      196
```

(2) INFORMATION FOR SEQ ID NO:759:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:759:

```

GAATTCGGCC TTCATGGCCT ACAGCAAATC TGCCTTCACA TGGTCTGCAT TCTAGTGGAG      60
AAGTCAGATA GAGGTAAGTA CGAAGACCAC AAAGCAGGTT AAAAAGTAAG GTGGGAAAGG      120
GATGCTATTT TAGACAAGGT GGTCAAGGCA AGCCTCTCAG AAGAGGGGAT AAGTGCTCAG      180
AGACCTGACT GAAGTGAGAG TGAGCTATTG ACACGGAGAA GGGCATTTC AACTCTGAAG      240
AGAAAGCAGG GGCAGGCTTT GGAGGGAGAG CTTGTTTATG TAGACAAGGA GGGGCAAAGA      300
GTCTTGTGGA TAAAGCAGAA TGAACAAGAG TAAATGGGAT TGTAATGAA ATGACTCGAG      360

```

(2) INFORMATION FOR SEQ ID NO:760:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 192 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:760:

```

GGACATATGC AGTCAAAAGT AGGTGCCCCAT ATATATAATG AAATACCAAA AGGACAATTT      60
AGAAGGTTGA ATGGAAACAT TATGGCATGC TTTAGACGTT CTGTTTGGT TTTCTTATTC      120
CCAGTCTTTG ATCTTTTAGG TCTATCCATT GGTAAAGATA TATTAGGACT CACATCAACT      180
CAAGGTCTCG AG                                     192

```

(2) INFORMATION FOR SEQ ID NO:761:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:761:

```

GAATTCGGCC TTCATGGCCT AGTTTATTGC TCCCAACTAT ACATCTTCAG ACTTCACTTA      60
GCATGTTACG GGTGGTTAGG TTCCAGGATT ATTGAGATCT ATTTCTACTC ACAATTGCTT      120
ATAAAATGAA ATCTATCGTC ACCTTAATTG CCTGTGCCTA AAAATATAGC ATGCTTGTCT      180
TGTGGGAAAT ATTCAGCCTG GTATGTGAGT GACTGAAATG CAACTCCGTG GAAACACCCC      240
AACTCCACAC ATTCATCCCC TTGGTAACTC AGCACAGTCA CAGAACTGA AGAAGTAAAA      300
TGATCCTCTT TATTGGCTT CTCGAG                                     326

```

(2) INFORMATION FOR SEQ ID NO:762:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:762:

```

GAATTCGGCC TTCATGGCCT ACTGGCCCAA GTGAACTTT TAACAGGCTT TTTGGAGATC      60
TCTTTAGCTA GATCCAAAAA TTCATCAGGT ATATTTTCTG TTTTCCAAGT TCATGCAGGC      120
AATAGCTTTG CTAATATATA ATACTAGTTG CCTGTTCATC GCTGCCATAT CAGTTTCATC      180
ACTCCTTTCC CAGTGCCAC TCGAG                                     205

```

(2) INFORMATION FOR SEQ ID NO:763:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:763:

```

GAATTCGGCC TTCATGGCCT AAAAATGAAT ATATTCCTAT CCTATATTAA GACACTTTCC      60
CTAACCTAAA AGTTTATTCT GTTTTAAAAA TAAATGAAAG TATTTGTATG GGCCCTGGGC      120
CTGACGGAGA TATGCCCTGC CCCCTCTCTA GAGTGCTGGG AATTCTCAGG TGACCCAGTC      180
CCACAGGCAG CCAAGTGCCC ACACATTTC AGGCTGCCCT CCACCAGGGC AGCGACCTCG      240
GGTCACCAGG GACACGCACA CCTAGAAAGC CGTGGGCTCC TCGAG                      285

```

(2) INFORMATION FOR SEQ ID NO:764:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:764:

```

AATTCTTTAT CATTTCAGAT ATTAAGGATT TCAGATTTTA AGAGTTATCA GTGAAACTGT      60
GTTACAAGAA TATTTTGTTT CTGAGACATC TCAGTATTAT AGGTGGCTTC AGACTAACAG      120
GCACAGAATA GGATAGTGTG AAGTATCTGA TTAGCTTTAC TGTACTTGGT ACCTTTAGGA      180
CGTTCAGCCA GAGGTGATTG GAGGGATTTG CACGTCTACC ACTCGTGTGT GTATCTGTGA      240
ACCATATCTC CTTTAGTGCC TGCTTTTGAA CTTTATATAA ACAGAATGAT GCTGCCTGTT      300
TATCTCTATA ATTTTCTTCT TTCCCTTAGC ACGTGCTCAC TCGAG                      345

```

(2) INFORMATION FOR SEQ ID NO:765:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:765:

```

GAATTCGGCC TTCATGGCCT AGAGAATGTT TTCATGTTAC TTATACTAAC ATTAGTTCTT      60
CTATAGGGTG ATAGATTGGT CCAATTGGGT GTATCTCGAG                      100

```

(2) INFORMATION FOR SEQ ID NO:766:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:766:

```

GGATTGAATT CTAGACCCTG CCTCGTCATT GTGGAACCCA TGGAGCAGTT TGATGATGAA      60
GATGGCTTGC CAGAGAAGCT GATGCAGAAA ACTCAACAAT ATCATAAGGA AAGAGAACAA      120
CCACCACGTT TTGCTCAACC TGGGACATTT GAATTTGAGT ATGCATCTCG ATGGAAGGCT      180
CTTGATGAAA TGGAAAAGCA GCAGCGTGAG CAGGTTGATA GAAACATCAG AGAAGCCAAA      240
GAGAAACTGG AGGCAGAAAT GGAAGCAGCT AGGCATGAAC ACCAATTAAT GCTAATGAGG      300
CAAGATCTAA TGAGGCGTCA AGAAGAACTC GAG                                     333

```

(2) INFORMATION FOR SEQ ID NO:767:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:767:

```

GAATTCGGCC TTCATGGCCT AGATAATATT TTATGTTTAT TGTGTGTTAG ACTGTGTTGA      60
AGTGGAAACT TTGGAACATT GTTGGAAACCA GTAAGAATCC CATTCTCTAG GTATCAGGTC      120
GTTAAAGTAG TTTAAAATAA CGTATTCCTT AATTTTCCTC AGCAGGTTCC CCCTCCCTTT      180
AACTTGTGTG TATAAATATA TGTGTGTGAT GTTTTCTCTT ACAAAGATAG TACTCGAG      238

```

(2) INFORMATION FOR SEQ ID NO:768:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:768:

```

GAATTCGGCC TTCATGGCCT AGGGATCCCA CCTTTTACAT CCTAGGTGTG AACAGATTCA      60
AATCCACTAT TCCTCCAGAT TTTATAGATG AGGAAACCAA GGTGCACAAG AGGGATTTTT      120
TTGTTTGTGTT TTTTGTTTTT GTTTGTTTTT GAGACAGGAT TTTGCTTTGT TGCCCAGGCT      180
GGAATGCAGT GGCACAAACA TGGCTCGCTG CAGTCTCGAA CTCCTACGCT CGAG          234

```

(2) INFORMATION FOR SEQ ID NO:769:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:769:

```

GAATTCGGCC TTCATGGCCT ACGGAATGAG AAGATGAAAA ATCAAATTAA GCAGATGATG      60

```


GATGTCTCTC	GGACACAGAC	TGCAATATCG	GTAAGTTGAAG	AGGATCTAAA	GCTTTTACAG	120
CTTAAGCTAA	GAGCCTCCGT	GTCCACTAAA	TGTAACCTGG	AAGACCAGGT	AAAGAAATTG	180
GAAGATGACC	GCAACTCACT	ACAAGCTGCC	AAAGCTGGAC	TGGAAGATGA	ATGCAAAACC	240
TTGAGGCAGA	AAGTGAGAT	TCTGAATGAG	CTCTATCAGC	AGAATCTCGA	G	291

(2) INFORMATION FOR SEQ ID NO:770:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:770:

CGCTGCGTGC	TTGTGAGACT	GCCTGTTCTG	GGACCAGCCC	CTGGGCTCTT	CCACCAAGAT	60
TTGGTGAGGG	TCCCCCTCTG	CCTCTCACAG	AAGCCCCTGG	CCCTGGACTG	TCCTGGGGGC	120
AGGGACACCT	GTGGCTGGGG	AAGGGATGGC	CAACAGCGGG	AAGCAGTTTG	CGCCTGGTGC	180
CTGATGATGG	TGAACCACGA	GACAGATGGA	GACGGGAGTC	AGGGGACCCT	GGGGACCCTT	240
CCAGGTCCAG	TGACCTTTTC	CCAGACAGGC	ACTCTCCAGG	CCTAGGACAG	ACAGGGCCCC	300
AACTCCTCAT	CACCCCATGA	CTTGGCCTGG	AGGAACCTGG	GGTGGGAAAC	AAGTAGTCCC	360
CCAACCTCAG	AGGCCAGAAC	CACAGGTGGG	GGACAGGGAC	CTCGACAGAG	CTGTGCCTGC	420
TCAACGCTCG	AG					432

(2) INFORMATION FOR SEQ ID NO:771:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:771:

GGTGTGGCTT	TGCCCCGTAC	GAGCGGCGCG	CCATGGAGTT	ACTGAAGGTC	TCCAAGGACA	60
AACGGGCCCT	CAAATTTATC	AAGAAAAGGG	TGGGGACGCA	CATCCGCGCC	AAGAGGAAGC	120
GGGAGGAGCT	GAGCAACGTA	CTGGCCGCCA	TGAGGAAAGC	TGCTGCCAAG	AAAGACTGAG	180
CCCCCTCCCCT	GCCCTCTCCC	TGAAATAAAG	AACAGCTTGA	CAGAAGCCCT	GGCTCTCCTG	240
CTGTCCGTGG	GTGGGTGTGG	GTGTGTCGGG	GGCCCCGAGT	CCCCTGTCTG	GTGCCCCGCTC	300
TGAGCCACAC	CCTCTCCGGG	TGCTGCCTGG	TCGTGAATCA	AAAGCCGTGG	CCCCCCACC	360
CTCCCCGGGG	CAGCAGGTGA	GGAAGCCGCT	GTACTCGAG			399

(2) INFORMATION FOR SEQ ID NO:772:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 520 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:772:

GAATTCGGCC	TTCATGGCCT	ACAAGAAAAA	AGAAAAGAAA	TCATTAACCC	CAGCTGTGCC	60
------------	------------	------------	------------	------------	------------	----

```

AGTTGAATCT AAACCGGATA AACCATCGGG AAAGTCAGGC ATGGATGCTG CTTTGGATGA      120
CTTAATAGAT ACTTTAGGAG GACCTGAAGA AACTGAAGAA GAAAAACAA CGTATACTGG      180
ACCAGAAGTT TCAGATCCAA TGAGTCCAC CTACATAGAG GAATTGGGTA AAAGAGAAGT      240
CACAATTCCT CCAAAATATA GGGAACTATT GGCTAAAAAG GAAGGGATCA CAGGGCCTCC      300
TGCAGACTCT TCGAAACCCA TAGGGCCAGA TGATGCTATA GACGCCTTGT CATCTGACTT      360
CACCTGTGGG TCGCCTACAG CTGCTGGAAA GAAACTGAA AAAGAGGAAT CTACAGAAGT      420
TTTAAAAGCT CAGTCAGCAG GGACAGTCAG AAGTGGTGCT CCACCCAAG AGAAGAAAAG      480
AAAGGTGGAG AAGGATACAA TGAGTGATCA AGCACTCGAG      520

```

(2) INFORMATION FOR SEQ ID NO:773:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 129 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:773:

```

GAATTCGGCC AAAGAGGCCT AGTTTATTGT TTGCATATAT TTTATAGTGT AGAGATTAGG      60
CATTTTAATA AAATTTTAAA ATTTCCAGGA TCTTACAGAA TGCTTTTATG TTACAGCTTA      120
CTCCTCGAG      129

```

(2) INFORMATION FOR SEQ ID NO:774:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 337 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:774:

```

GAATTCGGCC TTCATGGCCT ACACAACGGA AAGCTGTTTT TCTGATCGAG GCTCTCTGAA      60
GAGCATAATG CAGTCCAACA CATTAAACAA AGATGAGGAT GTGCAGCGGG ACCTGGAGCA      120
CAGCCTGCAG ATGGAAGCTT ACGAGAGGAG GATTCGGAGG CTGGAACAGG AGAAGCTGGA      180
GCTGAGCAGG AAGCTGCAAG AGTCCACCA GACCGTGCA TCCCTCCACG GCTCATCTCG      240
GGCCCTCAGC AATTCAAACC GAGATAAGA AATCAAAAAG CTAAATGAAG AAATCGAACG      300
CTTGAAGAAT AAAATAGCAG ATTCAAACAG GCTCGAG      337

```

(2) INFORMATION FOR SEQ ID NO:775:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:775:

```

GAATTCGGCC AAAGAGGCCT AGTGAGCGCG ACCATCATGT CCATGCTCGT GGTCTTTCTC      60
TTGCTGTGGG GTGTCACCTG GGGCCAGTG ACAGAAGCAG CCATATTTTA TGAGACGCAG      120
CCCAGCCTGT GGGCAGAGTC CGAATCACTG CTGAAACCCT TGGCCAATGT GACGCTGACG      180

```

TGCCAGGCCC GCCTGGAGAC TCCAGACTTC CAGCTGTTCA AGAATGGGGT GGCCCAGGAG 240
CCTGTGCACC TTGACTCACC TGCCATCAAG CACCAG 276

(2) INFORMATION FOR SEQ ID NO:776:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:776:

GAATTCGGCC AAAGAGGCCT ATGAAATAGA AGAAGGTAAA AATAAGGAAC AAGCAATAAA 60
CAGTTCAGAG AACATAATGG ACATCAATGA GGAACCAGGA ACAACTGAAG GTGAAGAAAT 120
CACTGAGTCA AGTAGCACTG AAGAAATGGA GGTCAGAAAGT GTGGTGGCTG ATACTGACCA 180
AAAGGCTTTA GGAAGTGAAG TTCAGGATGC TTCTAAAGTC ACTACTCAGA TAGATAAAGA 240
GAAAAAAGAA ATTCCAGTGT CAATTAAAAA AGAGCCTGAA GTTACTGTAG TTTCACAGCC 300
CACTGAACCT CAGCCTGTTC TAATACCCAG TATTAATATC AACTCTGACA GTGGAGAAAA 360
TAAAGAAGAA ATAGGTTCTT TATCAAAAAC TGAAACTATT CTGCCACCAG AATCTGAGAA 420
TCCAAAGGAA AATGATAATG ATTCAGGCAC TGGTTCCACT GCTGATACTA GCAGTATTGA 480
CTTGAATTTA TCCATCTCTA GCTTTCTAAG TAAAACTAAA GACAGTGGAT CGATATCTTT 540
ACAAGAAACA AGAAGACAAA AGAAAACATT GAAGAAACA CTCGAG 586

(2) INFORMATION FOR SEQ ID NO:777:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:777:

GAATTCGGCC TTCATGGCCT AGTTTATATA GAGTAGGTTT ACATAGAAAA GGAAAGTTCA 60
CTGAGATTTT TAGGTACAAG ATCTANCAAC ATGCACAAAC CAATATTGTT TATGTATAAC 120
AGCTTCAAAC AATTAGAAAT TGTAATAACC ATTATGAAAG TGATGAAAT TGTATTGCTT 180
AGTATTCTAC CAAAATTATT AAGTAATTTT TTTTTTTTTT TTTNANACGG AGTCCCGCCT 240
GGGCCACAAG NGCNAAAATT TGTTTCNAAA AAAAAAAGA AAAGAAAGAA AAAAAATTGA 300
ACTCTCAATC CCTAGATGTA AAATCAACCT CGTGTCTCTG ATTCACCAG TAATTCATAA 360
CCACAACCTG TGTGTCTTGA ACACCTACTA TGCTTGCCAT ACTTATAATT TTTATTTCAC 420
TTTATCTCTA AATTTAAGAT GAAGTTTCTC CTACTAACTC GAG 463

(2) INFORMATION FOR SEQ ID NO:778:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:778:

```

GAATTCGGCC TTCATGGCCT AGCTGGGAGT TACCTGNTAT CCTGATGGTG CCATGTGCTA      60
GCTGGGTGAC AATAACCCAG CCACCTAACA TCTCAAAGAT TGTTCCTTTT TGTGTGAAAT      120
AGGGATAGAG TTGTCTACTT CCCAGAGCCA GATAGAGAAC TTAAGAGATG AATCTGAAAA      180
TACAATAGCC TAAATAAATT CAAGGAAACA CTATTATCTT ACTGGATCTT TCCAGCAACC      240
ATGTTACTTT TGGCTGGATT TTGTATTTTC CAATTTGTGA ATGACACAAC AAAGAGCTAG      300
GTAGGTAAAG TAAATGGTTT CAGATAATAA GCCCAGTTAG CCCAGACGTT TATTTTCCAT      360
TTGCATAGAA AATGAATGTT TTATGCATAC ATTTGTTTGC CCAGGGCTAG GATATTACTT      420
GCATATGATG TTCTTATATA ATTAAAAAAA AGAATACAAC CTCGAG                        466

```

(2) INFORMATION FOR SEQ ID NO:779:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 519 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:779:

```

GAATTCGGCC TTCATGGCCT AATTCCACAG GGAAATGGGC AGACTGAACC AGTCCAGGTG      60
GTGAATTTTC CAAGAACATA GTTTAAGTTG ATTAAAAATG CTTTTAGAAT GCAGGAGCCT      120
ACTTCTAGCT GTATTTTTTG TATGCTTAAA TAAAAATAAA AATTCATAAC CAAAGAGAAT      180
CCCACATTAG CTTGTTAGTA ATGCTCTGAC CAAGCCGAGA TGCCCATCTCT CTTAGTGATG      240
GCGGCGTTAG GGTTTGAGAG AAGGGAATTG GGCTCAACTT CAGTTGAGAG GGTGCAGTCC      300
AGACAGCTTG ACTGCTTTTA AATGACCAAA GATGACCTGT GGTAAGCAAC CTGGGCATCT      360
TAGGAAGCAG TCCCTGGAGA AGGCATGTTC CCAGAAAGGT CTCTGGAGGG ACAAACTCAC      420
TCAGTAAAC ATAATGTATC ATGAAGAAAA CTGATTCTCT ATGACATGAA ATGAAAATTT      480
TAATGCATTG TTATAATTAC TAATGTACGC AGACTCGAG                        519

```

(2) INFORMATION FOR SEQ ID NO:780:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 321 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:780:

```

GAATTCGGCC TTCATGGCCT ACTAGACCCC CGCCACAGCA GCCTCTGAAG TTGGACAGCA      60
AAACCATGTC TTCACTACCC ATCGGTGTCC ATTTATAGAA TAATGTGGGA AGAAACAAC      120
CCGTTTTATG ATTTACTCAT TATCGCCTTT TGACAGCTGT GCTGTAACAC AAGTAGATGC      180
CTGAACCTGA ATTAATCCAC ACATCAGTAA TGTATTCTAT CTCTCTTTAC ATTTTGGTCT      240
CTATACTACA TTATTAATGG GTTTTGTGTA CTGTAAAGAA TTTAGCTGTA TCAAACTAGT      300
GCATGAATAG ATTCTCTCGA G                                     321

```

(2) INFORMATION FOR SEQ ID NO:781:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 560 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:781:

GAATTCGGCC	TTCATGGCCT	AAATGGGAAT	CATCATTGCA	TAACAAACCT	AAAGAGAAAA	60
TGAGAACATT	TACGAAGAAG	AAACAGAGTT	ACTGTACCAA	GGGCAAAAAG	AAAAGAAGGG	120
GGAAAAAATA	TAAGTCCATA	AAAGAAAAAC	AAAAGGAATC	CATGAGCCTG	GACGACAAGC	180
CGTGGGGGAT	GTAAGAAGGT	TTGGAACCCA	AAAGGCAAGT	CTAATCAGCT	GGGGTAACAT	240
GGCGAGGCAG	TTCCACATGC	TGAGACTTGT	GGCTACCACA	TTAAAAAAGA	CTGTGCATAT	300
TCTAAATGAC	AGCAGTCCTG	CAGTGACGTG	GATATTCACT	CTAGAAGCTA	TGCAGGCAGG	360
CGTGGGAAAA	GCGAAGAGAT	GTTGCACCAT	GCAGCTGCAA	TCTTTATGTC	TCTACTGGCA	420
CAACCGAAAA	GAGTAATGTG	GAAATTATCC	AGAGAATTTA	GGTGAGAAAA	ACAGAAGCCA	480
TCAGATTTTC	TCCTTTAAAT	CTTCAGAGGG	GTATACACTC	CCCTGGAAAA	CCAAGTTGCC	540
TCTCTGCTCA	CATCCTCGAG					560

(2) INFORMATION FOR SEQ ID NO:782:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:782:

GAATTCGGCC	TTCATGGCCT	AGGGGAGTCC	TCATTCTGAC	CTCAAAGAAA	GGACTGTATT	60
GTCTGGCTCC	ATAATGCAGG	GGACACCAAG	AGCAACAACCT	GAAAGCTTTG	AAGATGGCCT	120
TAAATATCCC	AAACAAATTA	AAAGGGAAAG	TCCTCCCAT	CGAGCATTG	AAGGTGCCAT	180
TACCAAAGGA	AAACCATATG	ATGGCATCAC	CACCATCAAA	GAAATGGGGC	GTTCCATTCA	240
TGAGATTCCA	AGGCAAGATA	TTTTAACTCA	GGAAAGTCGG	AAAACCTCCAG	AAGTGGTCCA	300
GAGCACACGG	CCGATAATTG	AGGGTTCCAT	TTCCCGGGC	ACACCAATAA	AGTTTGACAA	360
CAACTCAGGT	CAATCTGCCA	TCAAACACAA	TGTCAAATCC	TTAATCACGG	GGCCTAGCAA	420
ACTATCCCGT	GGAATGCCTC	CGCTGGAAAT	TGTGCCAGAG	AACATAAAAG	TGGTAGAACG	480
GGGAAAATAT	GAGGATGTGA	AAGCAGGCGA	GACCGTGCGT	TCCCGGCACA	CGTCAGTGGT	540
AAGCTCTGGC	CCCTCCGTTC	TTAGGTCCAC	ACTGCATGAA	GCTCCCAAAG	CACAACTGAG	600
CCCTGGGATT	TATGATGACA	CCAGTGTCTC	GAG			633

(2) INFORMATION FOR SEQ ID NO:783:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:783:

AAATGACACT	GAATGACACG	TTAGCCAAAA	CTAACAGAGA	ATTATTAGAT	GTGAAGAAAA	60
AATTTGAAGA	TATAAATCAG	GAATTGTAA	AAATAAAAGA	TAAGAATGAA	ATATTAAGAA	120
GAAACCTGGA	AAACACTCAG	AACCAATAA	AAGCTGAGTA	CATCAGCCTG	GCAGAGCAGC	180
AGGCAAAGAT	GAGCTCGCTA	AGTCAGAGCA	TGAGAAAGGT	GCAGGATAGT	AATGCTGAAA	240
TCTTGCCCAA	CTACAGAAAA	GGCCAAGAAG	AGATTGTGAC	ACTGCATGCC	GAAATTAAAG	300
CCCAGAAGAA	GGAGCTCGAC	ACAATACAAG	AATGCATTAA	GGTAAATAT	GCCCCAATTG	360
TCAGCTTTGA	GGAGTGCGAG	AGAAAATTTA	AAGCAACAGA	GCTCGAG		407

(2) INFORMATION FOR SEQ ID NO:784:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:784:

```

GCAGAAAAGT CAGAACAATT TGAGGAGCTT CAAAGCATCC TTAAGAAAGG GAAACTAACT      60
TTTGAGAATA TTATGGAAAA ACTGCGAATC AAGTATTCCG AAATGTACAC CATAGTCCCT      120
GCAGAGATTG AATCCCAGGT GGAAGAATGC AGAAAAGCTT TAGAAGACAT AGATGAGAAG      180
ATTAGCAATG AAGTCTTAAA AAGCTCACCA TCATATGCAA TGAGGAGAAA AATAGAAGAA      240
ATTAACAATG GGCTTCATAA TGTGAAAAG ATGTTGCAGC AGAAAAGCAA AAATATTGAG      300
AAAGCTCAAG AAATCAAAA GAAATGTGG GACTCACTCG AG                                342

```

(2) INFORMATION FOR SEQ ID NO:785:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:785:

```

GAGATAATGG ATGAAAGGAT TCAGAGGAAA GTAGAGAAAC TAGAGCAACA ATGTCAGAAA      60
GAAGCCAAGG AATTTGCCAA GAAGGTACAA GAGCTGCAGA AAAGCAATCA GGTGCGCTTC      120
CAACATTTC AAGAACTAGA TGAGCACATT AGCTATGTAG CAACTAAAGT CTGTCACCTT      180
GGAGACCAGT TAGAGGGGGT AAACACACCC AGACAACGGG CAGTGGAGGC TCAGAAATTG      240
ATGAAATACT TTAATGAGTT TCTAGATGGA GAATTGAAAT CTGATGTTTT AACAAATTCT      300
GAAAAGATAA AGGAAGCAGC AGACATCATT CAGAAGTTGC ACCTAATTGC CCAAGAGTTA      360
CCTTTTGATA GATTTTCAGA AGTTAAATCC AAAATTGCAA GTAAATACCA TGATTTAGAA      420
TGCCAGCNGA TTCAGGAGTA TACCAGTGCT CTCGAG                                456

```

(2) INFORMATION FOR SEQ ID NO:786:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:786:

```

GAATTCGGCC TTCATGGCCT AGGGGTGAGA GTGTAGACGG CTTTCCCAGT TGTATCCAAG      60
GCAGTCAGAC AGGGGGATTT GGGCTGTGTT GTGCCCCAGC GCTGCAAGGT GGCCAACAGC      120
GACGGCGGTC GGGGGACACC TGCAAGTACA GGCTCCCCTC TCAGCACACT CGTCTCGCTT      180
CCCTCAGGCT TTGGCTGATT TGGATCTGGT TGCTGAACTT CCAACAATTC CTCAAAATCA      240
TCCACAAAGA ACTCCTTCAG TGGAGGCGC TTTGGCCTCT TCAGGGTGTT CAGAAGCTGC      300
TGGAATTTGG AGGACACTCT GCTGTTTACA GGGACACCAT CTGCTGTTTC CAGCATGCTC      360
CCGCTGCACC CCCGAGGAAC ACTTCTACA GAAGCCACCT GTGGACGCTC AAAGTACGAA      420
TGCTCCACGA GGCCCGTGGT GACATCAGGA GGGGCAGAAT GCAGATCTAT GTGGGTGTGG      480
GCCTCGAG                                488

```

(2) INFORMATION FOR SEQ ID NO:787:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 452 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:787:

```
GAATTCGCCT TCATGGCCTA AGTGTCCGGA ACATATGTCA TGATTCTATG TCCAAACAAC      60
AGGCCAACCC TCAGGACAGA CCCC GCCACC CCCCTTCTCT GCAGCTCCTG GCAGGGACGG      120
TGCACAGTGG TGCCGTGTGC AGGGGGCCAG CGCAGCCACT GGGCATCTGG GGCAGCGCTG      180
GTCGCCTGGC CACCTCCTTG CTGGGGCCGC TGGGCCTCCG GCCTAGAAGG ACAGGAAGCC      240
ATCCACCTCA AGGCGCAGGA AGGGGTCCAG CAGGGCCCGG AGCTTCCAGA TGGTGGCAGC      300
GCTCAGCAGG GGCGGCACCA GCCCCTCGAA GGGCCTGGGG TTCACCATGT ACACGTAGGC      360
GACCAGCAGG GTGCCCAGCA GCAGCCTCAG GATCAGCAGC CTGAGAATCT CCAGCTGGAT      420
GTCCTCCATC TGGTCCCTAG ACCTGCCTCG AG                                     452
```

(2) INFORMATION FOR SEQ ID NO:788:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 388 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:788:

```
GAATTCGGCC TTCATGGCCT ACAGGACAGA GGCAAATAGT AGACAAAGGT GAAGCCAAAG      60
GCATAATTAA GGAAGGAAGA ACGATATTAC CAAAAGATGA AACTGAAAAG AAAGTCTTAA      120
CTGTGTCAAA TTCTCAAATT GAAACTGAAA TTGAAGTTCC ATCGTCCGCA GTTCCAGAAC      180
ACAGAATGTA TGAAAATCAA AGTCAGGTGG TCCTTGTAGA AAACCTTCAT GTTAACAAAA      240
CAATGAAC AATCAGACAT GAAAATAAAC CGTATGTTCC TAGTTCAGCA CAAATGACAA      300
GAAGGAAATT CAAAAGGCT AAGCCAAATT TGGGAAGAGC ACACAGTAAG AAAGAGGAAC      360
CAGTTTTAGA AAAAGTCACA AACTCGAG                                     388
```

(2) INFORMATION FOR SEQ ID NO:789:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 457 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:789:

```
GCCTGAAGAC ATCAAAAAGG AGGCAGCCCG GGCTTCTAGG AAGATCTGCT TTGTGTGCAA      60
GAAAAGGGA GCTGCTATCA ACTGCCAGAA GGATCAGTGC CTCAGAACT TCCATCTGCC      120
TTGTGGCCAA GAAAGGGGTT GCCTTTCACA ATTTTGTGGA GAGTACAAAT CATTTTGTGA      180
CAAACATCGC CCAACACAGA ACATCCAACA TGGGCATGTG GGGGAGGAAA GCTGCATCTT      240
ATGTTGTGAA GACTTATCCC AACAGAGTGT TGAGAACATC CAGAGCCCGT GTTGTAGTCA      300
AGCCATCTAC CACCGCAAGT GCATACAGAA ATATGCCAC ACATCAGCA AGCATTCTT      360
```

CAAATGTCCA CAGTGTAACA ATCGAAAAGA GTTTCCTCAA GAAATGCTGA GAATGGGAAT 420
TCATATTCCA GACAGAGATG CTGCCTGGGA ACTCGAG 457

(2) INFORMATION FOR SEQ ID NO:790:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 582 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:790:

GAATTCGGCC TTCATGGCCT AGCGGCAGCG GCTCTTCAAA GCGGAGCCGG GAGTTTTTGC 60
TACAGTTTTC GCCACCATGA GTCGCAGCTA TAATGATGAG CTGCAGTTCT TGGAGAAGAT 120
CAATAAAAAC TGCTGGAGGA TCAAGAAGGG CTTCGTGCCC AACATGCAGG TTGAAGGTGT 180
TTTCTATGTG AATGATGCTC TGGAGAAATT GATGTTTGAG GAATTAAGGA ATGCCTGTCTG 240
AGGTGGTGGT GTTGGTGGCT TCCTGCCAGC CATGAAACAG ATTGGCAATG TGGCAGCCCT 300
GCCTGGAATT GTTCATCGAT CTATTGGGCT TCCTGATGTC CATTCAAGGAT ATGGGTTTGC 360
TATTGGGAAC ATGGCAGCCT TTGATATGAA TGACCCTGAA GCAGTAGTAT CCCCAGGTGG 420
TGTGGGTTT GACATCAACT GTGGTGTCCG CTTGCTAAGA ACCAATTTAG ATGAAAGTGA 480
TGTCAGCCT GTGAAGGAGC AACTTGCCCA AGCTATGTTT GACCACATTC CTGTTGGGGT 540
GGGTCAAAA GGTGTCATCC CAATGAATGA CAAAGACTCG AG 582

(2) INFORMATION FOR SEQ ID NO:791:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 468 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:791:

GAATTCGGCC TTCATGGCCT ACATTTTCTG AGAAAGGTTT GGATGACTGA AATATTTTCT 60
CTACAGTCAA GGACTTTGGC ATGTGGTGGC TGAAACTGAG CTTTTTGTG TGGGCTCCAG 120
TTCTCACTGT TCTGCAATGC TCATGGCAAG TTGAATGGTG AGCTAGCTTA TAAATTAAAG 180
AGCTCTGAAC TGTATTCAGA CCGACTGGGT ATCTAGCTTA CTGTTTAAAC ATCATTGTTG 240
AAACCAGACC CTGTAGTCCA GTGGTGTGCT CCTGTTGTG AAAGTCTCC TTTTCTCTGT 300
GTTTTTGTAA AGAGCTTCCA TCTGGGCTGG ACCCAGTTCT TGCACATACA AGACACCGCT 360
GCAGTCAGCT AGGACCTTTC CGCCATGTAT TCTATTCTGT AGTAAAGCAT TTCCATCAAC 420
AATGCCTAAT TGTATCTGTT ATTTTGGTT TAACACACAC TGCTCGAG 468

(2) INFORMATION FOR SEQ ID NO:792:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 519 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:792:

GAATTCGGCC	TTCATGGCCT	ACGTGGCTAT	AACTGGAAAA	CTGGATCCGA	AATCGACCAG	60
TAAACTGGGT	AGCTCGGTCT	ACGCCCCGCC	CACCACCCTT	GCTAGCCAAT	AGCCTTCACA	120
ACTCTTCTGC	CACTCCCGCC	CATTCCAGTG	CTGTGCCGCT	GCTTTTTCTT	CCACTCGGAT	180
CTCTTGAGCG	CCCTTAGCCC	GCTGTATACG	CGCCCCCTCT	CGGCTTCAGT	AGGCAAGAGG	240
GCCATCTGCC	CTTCCTTCCT	GAAGGTAGAG	GGGACAACAC	CAGCTACGAC	GGGGACTCCA	300
GAAGTCCATC	TCCCGAACAG	CAGCGGGGCG	AAAAGAAAGA	AAAAGGGTTT	CCGAAGACTC	360
CTACTCACAC	CCACGCTTTC	CCTTAACCCG	GAAGTGATT	CCGCCCTCC	TCTCCCTCTT	420
CGGTTGATAC	TGGAGGAGAA	GGACGGCCAG	GTCTGGCCCC	GCATGCCCTG	GGCTTCCGGT	480
GACCTCTGGC	CCTTTTCTGT	CGTCCACTCT	CCGCTCGAG			519

(2) INFORMATION FOR SEQ ID NO:793:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:793:

GAATTCGGCC	AAAGAGGCCT	ACAGAAACAT	CCAATTCTCA	AACTGAAGCT	CGCACTCTCG	60
CCTCCAGCAT	GAAAGTCTCT	GGCGCCCTTC	TGTGCCTGCT	GCTCATAGCA	CCCACCTTCA	120
TTCCCCAAGG	GCTCGCTCAG	CCAGATGCAA	TCAATGCCCC	AGTCACCTGC	TGCTATAACT	180
TCACCAATAG	GAAGATCTCA	GTGCAGAGGC	TCGCGAGCTA	TAGAAGAATC	ACCAGCAGCA	240
AGTGTCCCAA	AGAAGCTGTG	ATCTTCAAGA	CCATTGTGGC	CAAGGAGATC	TGTGCTGACC	300
CCAAGCAGAA	GTGGGTTCAG	GATTCCATGA	ACCTCGAG			338

(2) INFORMATION FOR SEQ ID NO:794:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 756 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:794:

GAATTCGGCC	AAAGAGGCCT	ACCAGGATGG	TCTCAATCTC	CTGACCTCAT	GATCTGCCTG	60
CCTCGGCCTC	CCAAAGTGCT	GGGATTACAG	GCGTGAGCCA	CCGCACCCGG	CCCTAAACCC	120
TAGGTTTTGA	CTTCTGTAAG	AAGGAAAGAT	TTAAACAAAC	AAACAAACAT	TAAATTACAA	180
CCATAATAAA	CAAAAAAACA	CTAAACTAAA	TTACAACCAT	AATAAAATCT	CCCAAAGTCC	240
GTAGGCACTG	ACATATTACA	GCCTTGCCAA	ATCAGAATAG	ATTTCTCATG	TGTTGTCAAT	300
TTACCAGACA	CAAAGAGTAG	CTCAGATCTC	ATAGACTCTT	CAGATCTTGT	AGACTAATTT	360
CAAGTCTTTT	TAAAGTTTTG	AAAAACATGT	GCTATTTGGA	ATTACGTCAT	CCTCGAATAT	420
TAAACCTGAG	CTCAAAAACC	TATTGTTTGA	TATTGGAAAT	AGTTAACTCC	AGTTTCTTTC	480
TATTAAGATA	AAATTCTTTC	ATCATGTCTG	TGCCCTCTAA	AATAATACTC	CTATTGCTTT	540
GTCTTCCCCT	TCTCCCCTCC	TAGTCCTTCT	TAGTCATTTC	TATTTAGAAT	CAAGTCGCTC	600
ATGAGTTTAA	GAATTAGAGC	AGCAAGAAAT	TGGGCTAGAG	ATGTACAAAA	GCTTTGGACA	660
ATAGTAGTTT	TGCTTGTCCT	CATTCTTATT	AGAAGTGCTG	TTAATTTACT	GATAAATTC	720
AGGACGGAAG	ACAAATCTTT	GCAACTGGTA	CTCGAG			756

(2) INFORMATION FOR SEQ ID NO:795:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:795:

```

GAATTCGGCC AAAGAGGCCT ACCAGGAAGC TCTCCTGCTT GTCATGAAGT GAGAACAATG      60
AAAAGTCATA GCAGATACTC AGTTTAACTC TGTGTAGAAC CTATTAGTGT TTGAGCTGTT      120
ATTGAGATTT GAATTCAGAC TGTGTGTTGT TTGCTTATGG ACGCTGCCTG TCGTTCTGTC      180
ACTGTTAAAT TAATGAGTCT ATAAGGTTTT TCTTCCAGAG GCCATAGGTG ACATCACTAA      240
AATTGCAAGA TAAATTGTAA TCTTTGNTGN TGCTGCACTC CCCAACCTCT CCCCCACCCC      300
CCGTGGTGTG CTGCTTTCTA GATGAGCGTG TTTTGGAGCA GGCCCATCTG GGACACTCTA      360
TGCTTTTACC AAGGAAGTGC GATCTGAGCA GCCACAATCC AGCCAAAAGA GGATCGTAGA      420
TATTTGCTCT GATCAACTAG ATGAAATAT AGCAGAATGG ATTTAGCCCA CTGCTCTGTT      480
TTATCCAACG GAGTCTCTGA CCAGCAATTG GTGCATAATT ATTACAGCAA AAGTTAAGAA      540
ATGAAACTGT AGCAATTATG TAAATGAATG TGTTGGCCTC TTAATACCTG TTACTAGTGG      600
ACTTCCTGTG AGGAAGTTAG TTTTGTGTTT TGATGAAATG CTCTCGAG      648

```

(2) INFORMATION FOR SEQ ID NO:796:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 610 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:796:

```

GAATTCGGCC AAAGAGGCCT AAGAGGCTGG CCCAGTCCC AAGGAACAAG AGATGGTCAA      60
GTCGCTAGAG ACATATCAGG GGACATTAGG ATTGGGGAAG ACATTGACT GCTAGAATCA      120
GAGGTTGAGC ACTATACATA AGAACAGGCT CACATGGGAG GCTGGAGGTG GGTACCCAGC      180
TGCTGTGGAA CGGGTATGGA CAGGTCATAA ACCTAGAGTC AGTGTCTCTG TGGTCTTAGC      240
CCATTTGAGC ACCCTGCCAC TTGGAGTGGA CCCCTCCTAC TCTTCTTAGC GCCTACCCCTC      300
ATACCTATCT CCCTCCTCCC ATCTCCTAGG GACTGGCGC CAAATGGTCT CTCCTGCCA      360
ATTTTGGTAT CTCTCTGGC CTCTCCAGTC CTGCTTACTC CTCTATTTT AAAGTGCCAA      420
ACAAATCCCC TTCCTCTTTC TCAAAGCACA GTAATGTGGC ACTGAGCCCT ACCCAGCACC      480
TCAGTGAAGG GGGCCTGCTT GCTCTTTATT TTGGTCCCGG ATCCTGGGGT GGGGCAGAAA      540
TATTTTCTGG GCTGGGGTAG GAGGAAGGTT GTTGCAAGCA TCTACTGCTG CTGTACCCTA      600
GAAGCTCGAG      610

```

(2) INFORMATION FOR SEQ ID NO:797:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 286 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:797:

```

GAATTCGGCC AAAGAGGCCT AGCCACTATC CTGGTTACTT GTGGATTAC CAAGCAGTCC      60
AGCAAGTCAT CCGTAGAAAT GAATGTTTGA GGAGTCGTAG TAGTATTTGA GGCAATCTGT      120
TCCCAATTG CATTTTCACT GTTGCTCATT ATTTGTTGTC TCTTGGCACA ATGCAATTTT      180
CCAAAGTGTT CTCCATCCTT GTCCACAAAG TCTTTCCCAT CACTTCCAA TATGCTCCT      240

```

CTTTCTGAAG GCGGTTCTTC GGACCTCTGT GCTACAGGGA CTCGAG

286

(2) INFORMATION FOR SEQ ID NO:798:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 163 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:798:

GAATTCGGCC AAAGAGGCCT AGTTTTTTAT TGGTTTGGAG ACTAGAGCCA ATAGTATAAT	60
GTTCTCAAAG GAAACAGACT TGAGTTGTTG GATTAGAGGA ACTAACCCAA CTTATATGAT	120
TTTTTTTTTG TTTTGTGCGT GTAGTTATGG CACTAGTCTC GAG	163

(2) INFORMATION FOR SEQ ID NO:799:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 443 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:799:

GAATTCGGCC TTCATGGCCT AGAGGGAATG CGGAGAGGGG TGGAGAAATT CCATCTTTGT	60
TAGGGCAGCA GTCAAGGATG AGTGAGTTAG CCTCTTAAGG AAGAGGCTAA GCTGTTAGAA	120
TAAAGAGGTT TACAACATCA GCGGCTTAAA TCAAATAGAA GTGTGTTTCT CTTTCACATG	180
ACAGAGTAGA TGTGGCCTGG CATCTAGAAA GCATATTGT CTCTGCTCCA CTGTGTCTTC	240
CAGGGACCCA TTCTTCTCTT GTCTTCATGC TCCATCACTT CCTAGGGTGT TGTCTACACC	300
TGCATAGCCA TAGCTAATTT TCCATTCTCA GCACCAACCA GGGGAAGAGG AGGAAAGGTA	360
GCCTCCTTTT CATGATAGGT GTGAAGTTAT GCAGGACACT CTCAGGGTGA ATGGACCACA	420
GTGTGGCTCC TCCTGGGCTC GAG	443

(2) INFORMATION FOR SEQ ID NO:800:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:800:

GCATGTGCAG CGGCAAAGAG AACCCGGACA GTGATGCTGA CTTGGATGTG GATGGGGATG	60
ACACTCTGGA GTATGGGAAG CCACAATACA CAGAGGCTGA TGTCATCCCC TGCACAGGCG	120
AGGAGCCTGG TGAAGCCAAG GAGAGAGAGG CACTTCGGGG CGCAGTCCTA AATGGCGGCC	180
CTCCAGCAC GCGCATACA CTTGAGTTCT CTAAATGGGC CAGTGATGAG ATGCCATCCA	240
CCAGCAATGG TGAAAGCAGC AAGCAGGAGG CCATGCAGAA GACCTGCAAG AACGGTCGAC	300
TCGAG	305

(2) INFORMATION FOR SEQ ID NO:801:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 464 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:801:

```
GAATTCGGCC AAAGAGGCCT AAACACTCAA ATTTTACATT TTGAGCAGTA TTTACGCCTG      60
AATTAATTCA CAAGTTTCAA GGTCACTAAC TTTGGTTATA TTATATTATT ATTTTCCAAT      120
TTAGCCACCT CTTTATTGTG ATAATAGAGC ATACAGCAGC ACATAAAACG CAAAACCTCTA      180
GGACATAAAA AGTGGCATTG GGACGATGTT GCTCTGAAAT TTATGCATTA ATTAAACCGG      240
TATATATGTA TGCATTAATT AAACCAATAT TTATGAAGTT CCTACTGTGT TACAGACGTG      300
GATCCAGGCA CTGAGGATGC AGCAGGCCAT CCAAATATAA AGTTACTTCC TTAGGAAGCT      360
TCCATTCTAA TGGGAGAGTG TTGTTAAAGA GATATATAAT AATATGTAAA ATGAATCCAT      420
AATGGTGAGT ATTATGAAGA ATAAATTGCG CAGGTTTTCT CGAG                        464
```

(2) INFORMATION FOR SEQ ID NO:802:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 650 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:802:

```
GAATTCGGCC AAAGAGGCCT AATCTTCTGC CTGTTCTGAA AAAGCTTTGC TTCTTGTGAT      60
TTGTATCAGC AGGGGGAAAG GTCCTTACTG TTTTTCAGAG CCTACAGTTG TGATAGAGGC      120
TCCTCCCAGC CCCGCCACA GACCCCAACA GTGCCCTCTC TCACAAATGG ATTCTGGGGC      180
TTGGTCTTTA TTTTGTGTTT TGTGGGGGCG AGCATATGGA ACCCAAAAAT AGTATCATAG      240
CCTAAATTG GAGCTTTGTG CCAGCCTTGT CTGTAGGATG ACCCGTGTGG GTCTCACCTG      300
GTGACTGGGA GTCCACAGGG GTCAGTTAGT AGCAGGGAGC TGCAGGGCGC CTGTGAGCAG      360
AGACCGTCTC ATTCCCCAAA CCCAGGAGCC AGAGGAACTG ACGCCCGGAT AAATGCCCAA      420
GCCGCCCGG GTGGGATTAG TCGTCTACCT TCCCAGAAAT ACACCCTCCC ATCCTGTGAC      480
TTGGATACAG TTTACTGATG AAATTAGGGA ACCTCCTGCG CCTTACCAAG AAGCTGTGGC      540
TGGAACTTAG TCAATGAAAA ATGATTGTA AACTCTTTGG AGCTGGCTTT GAAAGAATGT      600
TTAAATGAT AGCTGATACT GCCAGACAAC AGAACAGGCC GGCCCTCGAG      650
```

(2) INFORMATION FOR SEQ ID NO:803:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 101 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:803:

```
GAATTCGGCC AAAGAGGCCT AAGAGAACAG GAGCATTACA GTAAAATTCC TAAGTAGCCA      60
ACTGATTGTC AGTGCCAGAA ATGAATACCG ATCCACTCGA G                        101
```

(2) INFORMATION FOR SEQ ID NO:804:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 723 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:804:

```
GAATTCGGCC AAAGAGGCCT AGCTCTCTGT ACCCAAGGAA AGTGCAGCTG AGACTCAGAC      60
AAGATTACAA TGAACCAACT CAGCTTCCTG CTGTTTCTCA TAGCGACCAC CAGAGGATGG      120
AGTACAGATG AGGCTAATAC TTA CTTC AAG GAATGGACCT GTTCTTCGTC TCCATCTCTG      180
CCCAGAAGCT GCAAGGAAAT CAAAGACGAA TGTCCTAGTG CATTGTATGG CCTGTATTTT      240
CTCCGCACTG AGAATGGTGT TATCTACCAG ACCTTCTGTG ACATGACCTC TGGGGGTGGC      300
GGCTGGACCC TGGTGGCCAG CGTGCA TGAG AATGACATGC GTGGGAAGTG CACGGTGGGC      360
GATCGCTGGT CCAATCAGCA GGGCAGCAAA GCAGACTACC CAGAGGGGGA CGGCAACTGG      420
GCCAACTACA ACACCTTTGG ATCTGCAGAG GCGGCCACGA GCGATGACTA CAAGAACCCT      480
GGCTACTACG ACATCCAGGC CAAGGACCTG GGCATCTGGC ACGTGCCCAA TAAGTCCCCC      540
ATGCAGCACT GGAGAAACAG CTCCCTGCTG AGGTACCGCA CGGACACTGG CTTCTCCAG      600
ACACTGGGAC ATAATCTGTT TGGCATCTAC CAGAAATATC CAGTGAAATA TGGAGAAGGA      660
AAGTGTTGGA CTGACAACGG CCCGGTGATC CCTGTGGTCT ATGATTTTGG CGACATCCTC      720
GAG                                                                    723
```

(2) INFORMATION FOR SEQ ID NO:805:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 406 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:805:

```
GAATTCGGCC TTCATGGCCT ACGGCCAAAG AGGAGGAGAT GGCGCCAGTC AGGGAGCGGC      60
CGTGGCCCGC ACAGTGAGGA AGCGCGAAGG CGGAGCAACC GAGGAATCCT CCGGAGAAGA      120
ATCAGAGCCG TCGCTACCGC CACTACCGCC ACCACCATGG AAGGAGCAAA GCCGACATTG      180
CAGCTCGTGT ACCAGGCAGT GCAGGCGCTT ACCACGACCC AGATCCAGC GGAAGGAGC      240
GCGCCTCTTT TTGGCTTGGG GAGCTGCAGC GTTCGGTTCA TGCTGGGAG ATCTCAGACC      300
AGTTGTTACA GATCCGGCAG GATGTGGAGT CATGCTATTT TGCTGCACAG ACCATGAAAA      360
TGAAGATTCA GACCTCATTT TATGAGCTCC CCACAGTACT CTCGAG                        406
```

(2) INFORMATION FOR SEQ ID NO:806:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 329 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:806:

```
GAATTCGGCC TTCATGGCCT ACGCCCGGGT TGAAGTGTG CAGTCAATGA GCTCCCGCTC      60
CTCTGGATC CGTCTGTAGG TCTCCCGGTG GTGCATGAGC AGCTCACTCA CTGGCTTCTT      120
TAGGTGTTTC CTGAGGGCTT CCTGCTGCTT CTTCCGCAGG GCTGTGTTAC GCTGCCAGTT      180
```

TTTCAGAAAG TTGTGCTGAG GAGGTGGGGC CCAGGGAGGT CTCTTCTCTT CTTTGGGGC	240
TTTTTGCTTT GACTCTCCTT CAGCAGAGAT GAGGGTCATC AGACAGGGTG AGGTAGGTAT	300
CCGCTCAGCC AGCTGGGTGT TCCCTCGAG	329

(2) INFORMATION FOR SEQ ID NO:807:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 225 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:807:

GAATTCGGCC TTCATGGCCT AAGGTACTTT AATCAGTCTA AATACTTGAA CATTTTTATT	60
TCAGTGGTAA AAAATAGACT GAGGCAGAGT GAAGTTATAA ATTAGAATCT AAAAATTTAC	120
CCTTCAACAT TAATATTTT TAGTGCTCTA ATATAAAACA CAGAAAACCT ATCTCAAATA	180
TAAAAGATGA ATATAAAATT ATTAATTAAC CAACTGGCGC TCGAG	225

(2) INFORMATION FOR SEQ ID NO:808:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 275 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:808:

GAATTCGGCC TTCATGGCCT AACTTGCTCT TCTGTTTCTA GTTTTATAAA GTGAAAGCTG	60
CAATCATTGA TTAGAGACAG TTCTACGCTA AAGTCATAAT GACATTTTAT GTAATTTCTT	120
TTTTCTTTTT TTTGAGACAG AGTCTCGCTC TGTTGCTCAG GCTGGAGTGC AGTGGAGTGA	180
TCTCAGCTCA CTGCAACCTC TGCCTCCAG GTTCAAGCGA TTCTCCTGCC TCAGCCTCCC	240
GAGTAGCTGG GATTACAGGC CCCACCAAC TCGAG	275

(2) INFORMATION FOR SEQ ID NO:809:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 253 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:809:

GCGATTGAAT TCTAGTTGCC TACCTACCAA ACTACCTACT GAACTTTTAA ATTTGAAGAT	60
ATTCCTCCTG GACTACTTGT TTATAGTTTA TTAATGAAC TGCTCTATTT CTAATAACTT	120
TATTTTAAAT GTCCTTTCCC GTTTAGAATG CCGCATACTC TTGCTTGTGG GGTATATATC	180
TCTGATCGTG ATAATACCT ACCGAAAACC TTTCATGGCT CCTTGCCAAC TACAAAATTG	240
CGATATCCTC GAG	253

(2) INFORMATION FOR SEQ ID NO:810:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:810:

```

GAATTCGGCC TTCATGGCCT AGATTGAATT CTAGACCTGC CGACGCGGG AGAGACAAAA    60
AAGAGAAAAG CTTTGAAAAG CACAAGGAGA AGAAGGATAA AGAGTCCACA GAAAAGTACA    120
AGGACAGGAA GGACAGAGCC TCAGTGGACT CCACGCAAGA TAAGAAAAAT AAACAGAAGC    180
TCCCCGAGAA GGCTGAAAAG AAGCACGCTG CCGAAGACAA GGCTAAAAGC AAACACAAAG    240
AGAAGTCGGA CAAAGAACAT TCCAAGGAGA GGAAGTCCTC GAG                      283

```

(2) INFORMATION FOR SEQ ID NO:811:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:811:

```

GAATTCGGCC AAAGAGGCCT AGGCTTCCAC CCAGGAAATG ATCCAGAGCC TCTTTTATGT    60
TATGTTTTTT GTTTGTTTCT TTCAAGACAA TCGATCAAGC CAGAGGCATT CCCACCCCTT    120
CAGCAAGACA CTTCCAGTA AGCCCAGCTG GCCTTCAGAG AAAGCAAGGC TCACCTCCAC    180
CCTGCCGGCC CTGACTGCTT TGCAGAAACC TCAAGTCCCA CCCAAACCCA AAGGCCTCCT    240
TGAGGATGAG GCTGATTATG TGGTCCCCGT GGAAGATAAT GATGAAACT ATATTCATCC    300
CACAGAAAAG CTCGAG                      316

```

(2) INFORMATION FOR SEQ ID NO:812:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:812:

```

GGGATGCATA GATTTAGTTC TGCCTCACAG GCAGGTAGCC TGAGCTCCTA GGGGGAAGTG    60
TTTTTGCTAA GTAGGGAATG AAAAGCATGT TTATTTAAGC ACAAATTAAT ATCTCTCCTA    120
TTTTTATATG ATTTCCCGTT GTTTTCTTCC CTGTAGGGAA ATCTGCTGTG ATAGAGAACT    180
GCGTAACAGG CCTTTTCTGT GAGCGCTCAC TCATACATTA TGCACGACGT GGCTAAGATC    240
TTTGATGGCA CTCGAG                      256

```

(2) INFORMATION FOR SEQ ID NO:813:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:813:

GCAAGCGGCG	CATGCAGGAG	GAGAAGCAGA	AGTCTGTCAA	CGTCAAGAAG	ACCATCCTGG	60
AGATGCGCTA	CGGGGCTGAT	GTGGATGCCG	GCTCCATTGT	GCACGCCGCC	CAGAAGCTGG	120
GCGAGCCTCC	CGTGTGCCCC	GTATCTCGCA	TGGCCTCCAT	CCCCCTCCATG	ATCGGGGAGA	180
AGCTGCCCCAC	CGCCAAGGGG	TTGGAGGCCG	GGCTGGACAC	ACCCAAGGTA	GCCACCAAAG	240
GCAACTATAT	CGAGGTGCGC	ACAGGCGCCG	GCGGGGACGG	TCTGGCTCGG	CCCGAGGATG	300
ACCTCCCGGA	CCTCGAG					317

(2) INFORMATION FOR SEQ ID NO:814:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:814:

GAATTCGGCC	TTCATGGCCT	ACGAACTCCT	GACCTCAAGT	GATCGGCCTG	CCTCAGCCTC	60
CTAAAGTGCT	GGGATAGCCA	CTGTGCCCAG	CCTAGCCCTT	CTTCAAATGT	TTGGTAAAAT	120
TCAGCATTGA	AGCCATCAGG	TCTTGGGCTT	TTTGCTGGGA	GATTTTAT	TATGGCATCA	180
ATCTCATTAC	TTGTTACTGG	CCTGTTTAGG	TTTTCAGTTT	TTTCATGGTT	CAATCTTGST	240
AGGTTGTTTG	TGTCTAGGAA	TGTATCTGTT	TCTTCTAGGT	TTTCCAGTTT	CTTGGCGTAT	300
AGTTACTCAT	AGTAGCCACT	AATTATCCTT	TGGATTCTG	CGGTATTGGT	TGTAGTGTCC	360
CCATCTCGAG						370

(2) INFORMATION FOR SEQ ID NO:815:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:815:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCC	TCAAGCCTAT	CTTTTAGTCT	60
TCCTAGAAGC	ACCGTGTTCT	GTGGAAGTCA	GCATCAGCAG	CTTGCTGAG	GACTCCCCCA	120
TCTTCCTTTC	CTTCCCCGGA	AAGCACAGAC	CTAAGTGAGT	CTTCACTGGA	TCCCAGCTAA	180
CAGCTTCTGC	CCATTCCCTAT	CTTTCCACAG	AGCCAGTGGC	AGCCCCAGCT	GCAGCAGCTA	240
CGTGACATGG	GCATCCAGGA	CGATGAGCTG	AGCCTGCGGG	CCCTGCAGGC	CACCGGTGGG	300
GACATCCAAG	CAGCCCTGGA	GCTCATCTTT	GCTGGAGGAG	CCCCATGAAC	TCCCTGCTTC	360
CCCTGAACCC	CCAGCACTCG	AG				382

(2) INFORMATION FOR SEQ ID NO:816:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:816:

```

GCCACGGTGC TCATTCAGAC TACCCGTGTG CCCAAGCAGG TGGCAGTACC CGCGACAGAC      60
ACCACTGACA AGATGCAGAC CAGCCTGGAT GAAGTCATGA AGACCACCAA GATCATCATT      120
GGCTGCTTTG TGGCAGTGAC TCTGCTAGCT GCCGCCATGT TGATTGTCTT CTATAAAGTT      180
CGTAAGCGGC ACCAGCAGCG GAGTACAGTC ACAGCCGCCG GGAAGTGTGA GATAATCCAG      240
GTGGACGAAG ACATCCAGC TGCAACATCT CGAG                                     274

```

(2) INFORMATION FOR SEQ ID NO:817:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:817:

```

GAATTCGGCC TTCATGGCCT AAAAAAATAC ACCTGTGGTC CCAGCTGCTC GGGAGGCTGA      60
NTTACGAGAG TCCCTTGAAC CTGGGAGGCG GAGGTTGCAG TGAGCTGAAA TCATGCCACT      120
GCACTCCAGC CTGGGCAACA GAGCGAGACT CTGTTNAAAA AAAAAAAAT AGCGAGAGAT      180
CGAGAGAGAG TGCACGTGAG AAGACTAGTA GTTGCTATGG ACTGGGGGAG AAGGAACGGG      240
TTACAGGGTT TCTTTTGGGG ATAACGAAAA TGTCTAAAA CTGGACTGTG GTGATAACTG      300
CACAACCTCTG TGAATGTACT AAAAATACT GAAGTGGCCG GGCGCGGCAG CTCGAG      356

```

(2) INFORMATION FOR SEQ ID NO:818:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:818:

```

GAATTCGGCC TTCATGGCCT AGGCAGGGTG TCAACTTATT TAATTCTAAA AATAGTATAT      60
TCATAGAGAT ACTATCATCC TCATTCATA TATTCAAAAA ATTCAAAGAA GTTAAGTAAA      120
TTGCCAAAAG TCACCCAGAT AATAAGTAGA AAAGATGGTA ATGAAATCCA GGTGGCCTT      180
CGAG                                     184

```

(2) INFORMATION FOR SEQ ID NO:819:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:819:

```

GAATTCGGCC TTCATGGCCT ACAACAACAA CAACAAAAAA ACATCATCCG GGAAGCTTT      60
TCAATATCCT GACGTGGGT CTCTCCAGTG TAGATGGAAA TATGGAATTG GGAATAGACA      120
TCGATATTTT TGGAGGTCCC CAGGGGTTAC CAATGTGCAG ACAGGTTTGG GAACCACTGC      180
ATTAGGCATT TTACATTTAT TTAGGGCTTT CACTGGATTG GTCACCCCAT ACTTTCATAA      240
TCCATTTTTT CTGATTTTTT TTCTGGTTTT TGGTGAGGGT ATAGTTGGGA TGGGGTTTTT      300
TTTTTTGTCC TCCCACCGCT CGCCCCATC CAGTGTGGAC GTACTCGAG                   349

```

(2) INFORMATION FOR SEQ ID NO:820:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 167 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:820:

```

GAATTCGGCC TTCATGGCCT ACTCTTTCCT TGAAGAATTT GTTGAAGACT TCAGAAGTGA      60
TGCTGGCTGC TTTCTTCATT AGGTTGAGCT CCCCATCCTC CTTTACAGCG ATGGTATATG      120
CCACAAGTGC ACTGATATCT ATTTGTCAA AGCCTTCAGG TCTCGAG                   167

```

(2) INFORMATION FOR SEQ ID NO:821:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 733 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:821:

```

GAATTCGGCC AAAGAGGCCT AGCGAAATAA AACAAGGGAG TCAGCAAAAC CAGAAATTC      60
AGCAATGTCA GCTCATGACA AGGCTGCATT ATCAGAAGAG GAACTGGAGA GGAAGTCGAA      120
ATCTATCATT GATGAATTTT TACACATTAA TGATTTTAAG GAAGCCATGC AGTGTGTGGA      180
AGAGCTGAAT GCCCAGGGCC TACTACATGT TTTTGTGAGA GTGGGAGTGG AGTCCACCCCT      240
GGAAAGGAGC CAGATACCA GGGATCACAT GGGCCAACTA CTCTATCAGC TGGTACAGTC      300
AGAAAAACTC AGCAAACAGG ACTTTTTCAA AGGTTTTTCA GAAACTTTGG AATTGGCAGA      360
TGACATGGCC ATTGATATTC CCCATATTTG GTTGTACCTT GCTGAACTGG TGACCCCAT      420
GTTAAAAGAA GGTGGAATCT CCATGAGAGA ACTTACCATA GAATTTAGCA AACCTTTACT      480
TCCTGTTGGA AGAGCTGGGG TCTTGCTATC TGAATATTG CACCTACTAT GCAAACAAAT      540
GAGCCATAAG AAAGTGGGAG CCTTATGGAG GGAGGCTGAC CTCAGCTGGA AGGACTTTTT      600
ACCAGAAGGA GAAGATGTAC ATAATTTTCT TTTGGAGCAG AAGTTGGACT TCATAGAGTC      660
TGACAGTCCC TGTTCCTCTG AAGCACTTTC AAAGAAAGAA CTGTCTGCCG AAGAGCTGTA      720
TAAGCGACTC GAG                                           733

```

(2) INFORMATION FOR SEQ ID NO:822:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 512 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:822:

TGCCAGATAG	TTCTGCAGAA	GAAATCACTG	TTTGTCTGTA	GACACAGGTA	AGTTCCTCTG	60
AAACTTTTGA	CCTTGAAAGA	GAAGTCTCTC	CAGGTAGCAG	AGATATCTTG	GATGGAGTCA	120
GAATAATAAT	GGCAGATAAG	GAGGTTGGTA	ACAAGGAAGA	TGCTGAGAAG	GAAGTAGCTA	180
TTTCTACCTT	CTCATCCAGT	AACCAGGTAT	CCTGCCCGCT	ATGTGACCAA	TGCTTTCCAC	240
CCACAAAGAT	TGAACGACAT	GCCATGTACT	GCAATGGTCT	GATGGAGGAA	GATACAGTAT	300
TGACTCGGAG	ACAAAAAGAG	GCCAAGACCA	AGAGTGACAG	TGGGACAGCT	GCCCAGACTT	360
CTCTAGACAT	TGACAAGAAT	GAGAAGTGTT	ACCTCTGTAA	ATCCCTGGTC	CCATTTAGAG	420
AGTATCAGTG	TCATGTGGAC	TCCTGTCTCC	AGCTTGCAAA	GGCTGACCAA	GGAGATGGAC	480
CTGAAGGGAG	TGGAAGAGCA	CGTTCGCTCG	AG			512

(2) INFORMATION FOR SEQ ID NO:823:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:823:

GAATTCGGGC	CTTCATGGCC	TACTCTCATC	TGTATCTGTT	TCCTCTAACT	TTACTGAAAA	60
GATAGAATTC	ATTAAGCATG	AATTCTACCA	TCTTCTCCCT	ACTACAGCTC	TGTCAAAAAG	120
ATGTTGCTCT	CTGAGCCCAA	CTCTCCCTCA	GTCCCCAGGA	TTCTGTCCCT	GTCCACCTTT	180
AATCTTTTCC	TTTCTGATT	TTATGTTATA	AGTTATTTAG	ATTTGATGA	GAGATAATCG	240
TACCTAGAGT	ATGGGAGAAC	TATTTAAGGT	TTACAGGTG	GGTGGAAACC	TTGTATATAC	300
TAGATGGTAC	TGTGAGGGCT	TGCCCACTG	TCAGCCTTCA	TCTGAACAGA	GCAGAAAGTG	360
TTTCTGCATG	TTACCAAGC	CCTGCTGGAC	TGTATCACTT	TTCTCTGTGG	GCCAAAACCTC	420
GAG						423

(2) INFORMATION FOR SEQ ID NO:824:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:824:

GAATTCGGCC	TTTCATGGCCT	AGCGGCCTCA	GATGAATGCG	GCTGTTAAGA	CCTGCAATAA	60
TCCAGAATGG	CTACTCTGAT	CTATGTTGAT	AAGGAAAATG	GAGAACCAGG	CACCCGTGTG	120
GTTGCTAAGG	ATGGGCTGAA	GCTGGGGTCT	GGACCTTCAA	TCAAAGCCTT	AGATGGGAGA	180
TCTCAAGTTT	CAACACCACG	TTTTGGCAAA	ACGTTGATG	CCCCACCAGC	CTTACCTAAA	240
GCTACTAGAA	AGGCTTTGGG	AACTGTCAAC	AGAGCTACAG	AAAAGTCTGT	AAAGACCAAG	300
GGACCCCTCA	AACAAAAACA	GCCAAGCTTT	TCTGCCAAAA	AGATGATCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:825:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:825:

```
GAATTCGGCC AAAGAGGCCT AGGAGTAAGG ATGCAGAAAT GATTGCAGCA TATTTTCATTC      60
TCTACGCAAG GATGTTCTCT GGAAATGGAG GCGACATTGC TGCCTGCTTT TTGAGGGGAA      120
TTGATGATGT TCACTGGAAG GAAAATGGGA CATTAGTTCA AGTAGCAACT ATATCAGGAA      180
ACATGTTCAA CCAAATGGCA AAGTGGGTGA AACAGGACAA TGAAACAGGA ATTTATTATG      240
AGACATGGAA TGTAAGGCC AGCCAGAAA AGGGGGCAGA GACATGGTTT GATTCCTACG      300
ACTGTTCCAA ATTTGTGTTA AGGACCTTTA ACAAGTTGGC TGAATTTGGA GCAGAGTTCA      360
AGAACATAGA AACCAACTAT ACAAGAATAT TTCTTTACAG TGGAGAACCT ACTTATCTGG      420
GAAATGAAAC ATCTGTTTTT GGGCCAACAG GAAACAAGAC TCTTGTTTA GCCATAAAAA      480
GATTTTATTA CCCCTTCAAC CTCGAG                                         506
```

(2) INFORMATION FOR SEQ ID NO:826:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:826:

```
GATGGAGCAG TTCCAGAAGG AGAAGGAGGA ACTGGACAGG GGCTGCCGCG AGTGCAAGCG      60
CAAGGTGGCC GAGTGCCAGA GGAACTGAA GGAGCTGGAG GTGGCCGAGG GCGGCAAGGC      120
AGAGCTGGAG CGCCTGCAGG CCGAGGCACA GCAGCTGCGC AAGGAGGAGC GGAGCTGGGA      180
GCAGAAGCTG GAGGAGATGC GCAAGAAGGA GAAGAGCATG CCCTGGAACG TGGACACGCT      240
CAGCAAAGAC GCCTTCAGCA AGAGCATGGT AAATACCAAG CCCGAGAAGA CGGAGGAGGA      300
CTCAGAGGAG GTGAGGGAGC AGAAACACAA GCTCGAG                                         337
```

(2) INFORMATION FOR SEQ ID NO:827:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:827:

```
GAATTCGGCC AAAGAGGCCT ACAGGTACAG AATCATATGA ATGTTTCTTT CTTTCTTTCT      60
TTTCTTTCTT TCTTTCCTTC TTTCTTTCTT TCTTTTTTTG AGACAGAGTC TTGTTCTGTT      120
GCCAGACTGG AGTGCACTGA CTCAATCTCA GCTCACTGCA ACCTCCACCT CCCAGGTTCA      180
AGCAATTGTC CTCCTCAGC GAGGACCTGC CTCGAG                                         216
```

(2) INFORMATION FOR SEQ ID NO:828:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:828:

```

GAATTCGGCC AAAGAGGCCT AAAAAAAGA AGATGGGTTT TTTAAGTCCA ATATATGTTA      60
TTTTCTTCTT TTTTGGAGTC AAAGTACATT GCCAATATGA AACTTATCAG TGGGATGAAG      120
ACTATGACCA AGAGCCAGAT GATGATTACC AAACAGGATT CCCATTTTCGT CAAAATGTAG      180
ACTACGGAGT TCCTTTTCAT CAGTATACTT TAGGCTGTGT CAGTGAATGC TTCTGTCCAA      240
CTAACTTTCC ATCATCAATG TACTGTGATA ATCGCAAACCT CAAGACTATC CCAAATATTC      300
CGATGCACAT TCAGCAACTC TACCTTCAGT TCAATGAAAT TGAGGCTGTG ACTGCAAATT      360
CATTCATCAA TGCAACTCAT CTCGAG                                     386

```

(2) INFORMATION FOR SEQ ID NO:829:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:829:

```

GAATTCGGCC AAAGAGGCCT AGCTGAATCC TAGATTTCAG CTTCTCACTC AGAATTTAAG      60
CTGTTTTTCAG TACCAGAAAT ATTTAAGACT GTTAGTTTAA CTTCTAAGAA TAGCAGATAA      120
AGCGTATAGG TGTTTTGAGA TAACCGTATT CATAGGAAAA ACAAAACATAA AACTTTTCATA      180
ATTTTGGGAA GAGTTACACA CAAAAATATC ATCATTGAAT AATTAGTACA ACAAAAATGC      240
ATTTGTTTGT CCTAAAGGTT GAAATGAACA GAATCATGAT GGAATACTC GAG              293

```

(2) INFORMATION FOR SEQ ID NO:830:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:830:

```

GAATTCGGCC AAAGAGGCCT AATTGAATTC TAGACCTGCC TATGTCCTAT TCCCTGTGTC      60
CTGCAAGACC CCCTTTGGTT TGGTTTTCTT TTCTTTTCTT TTTTCTTTT TTGAGACTGC      120
GTCTTGCTCT GTCTCCAGG CTCGAG                                     146

```

(2) INFORMATION FOR SEQ ID NO:831:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:831:

```

GCGATTGAAT TCTAGACCTG CCTCTCATCC ACTATTGTCT TTCCCAATT TTTTCTAGC      60
CTTATCTTCC AGAATTCCTC TCAGACATAG GTGGCCCTGG TTGCTTGATC CTGTCTCTAA      120

```

GTTCGCTCTT CATGTTTCT CTCCTCAGAT TGCTCGAG

158

(2) INFORMATION FOR SEQ ID NO:832:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 317 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:832:

GAATTCGGCC TTCATGGCCT AGCTGATTTA AATCTAAAA CTGGATAAGA AGCTGTGGCT	60
TGTAATTAAA AATAGACCTT TATCACTAG ACCTACAGTT TGCTTTTTTC ATATGTTAAG	120
AAAAGTTTAA TATCCTGCT CTCTATTTC GTTCTAGGGG CACCACTATC AGTTAACCCCT	180
AAAGATTCT GTGGGTGAAA CCATTTGAT TACCATCTG CTCTGCTGCC AGTTATGGTA	240
ACCAAACCTCT CTTTGTTCCT GGATGCTAAA TCTGTCCACT TGTGCCTTAA CTACATCCTA	300
ACTCCCGTCA ACTCGAG	317

(2) INFORMATION FOR SEQ ID NO:833:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 339 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:833:

GAATTCGGCC TTCATGGCCT AGCCCCCGGA GCCCACCACA GTCCCCAGAG TGTGATAAAA	60
ACAATTTTAA TACTTCTTAT CTCTTCTAG TAGTCTACAT CCCATTCCCA GTCTTTCCAA	120
TCATAAAAAA TTGTAGTTTA TTTAGTTCAC ACTTGAACGT CCTATGAAAC TGTTTTAAAC	180
CTTTTACCTA TCTTGTTCCT TGTCATTATT CTTAAGCCAT TGATACAGAA ATCAGAACCA	240
AATTTAATAT TGTTGTGGGT ATGAGACAGT TTCTGTCATG TTTTAATTTT TTCCTTAAAG	300
TTTACTATG TACTTCATAT ATACCGGGCA CTCTCGAG	339

(2) INFORMATION FOR SEQ ID NO:834:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 396 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:834:

GAATTCGGCC TCATGGCCTA TGACTTTTAA GTTCTTATT AACTGAGAA ACACCTAACT	60
ATCCTAATAG AATTAAATTT CCCTAAGTTA TAAGACACTT GAATTTTTTA AAAAGAGATA	120
ATTAAATTTT TCCTATATTT TATTTCAATT ATTTTTCAG TCATGCTCCT TCTGTATCTC	180
CTATATTTTA TTATATTACT TACATGGCTT TATTTTACA ATAACCTTTT TTTCCCTTC	240
TTTATTATAT TTGTTTATTT TTGGAAACAG AGTTTCCTTA TGCTGCCAC GCTGGTCCTG	300
AGCTCAAGCA ATCTTCACGC CTCAGCCTCC CAAAATTATA GGACTACAGG CATGAGCCAC	360
TGTGCCTGGC CTAAGCCACT GCACCGGCG CTCGAG	396

(2) INFORMATION FOR SEQ ID NO:835:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:835:

```

GAATTCGGCC TTCATGGCCT ACTTTTACTC ATGCATAATT TTGTAAAATC CTACATTGGT      60
CATTGCGAAA ATATTGATTG ACTGAGTAAT ACAACTCTTC CAAATGTTGA ATGTTTCATT      120
CTACAATATC AGAAACTCAA TTTGTTAATG TTACTACTAG TCTCATCAGA AATGTCTTTA      180
AGTATTGTGT AACTGGCAAA CTCATAGTGA CGACTACAGG CTTTCCAGAA TTTTCATTTT      240
CATTTGAAGT CTGAATTTTA TCAACTATAA ATACTGTCAG TTGTTTCCCT CGAG          294

```

(2) INFORMATION FOR SEQ ID NO:836:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:836:

```

GAATTCGGCC TTCATGGCCT ACTCTGATAC TAACTGTAGT CTACATTTAT ACATTGTGTC      60
TGAATGCTGG TTTTGTTGGCT TCACTAGCTC CCTTTTCTC TCTCCTTTT TATCCTGTCT      120
TTTGCTGCTG CTTTCCACCT TCTGTCCAGC TCCATCTTCA GACAGCTCCC TGTATAACGC      180
TCCACTTCCT GAGTATTCCA GTTGCCAGCC TCCTTCAGCA CCTCCTCCAT CATACGCTAA      240
AGTCATCTCA GCTCCAGTGT CAGATGCCAC TCCTGATTAT GCTGTAGTGA CTGCTTTGCC      300
ACCTACTTCC ACACCCCTA CACCACCACT GCGACACCCA GCGACACTCG AG          352

```

(2) INFORMATION FOR SEQ ID NO:837:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:837:

```

GAATTCGGCC TTCATGGCCT ACCGGACCTT GAAAATGGAA TGTTCAGAAA CACATGTGCA      60
AGGGAGCTGT GCCAAGCTCA TGTTGCGAAC AGGCCTCCTG ATGAAGCTTC TCAGCGAGCA      120
GCAGGAAGCA AAGGCATTGA ATGTAGAATG GGATACGGAC CAACAAAAAA CAAATTATAT      180
TAATGAGAAC ATGGAACAGA ATGAACAGAA AGAGCAGAAG TCAAGTGAGC TCATGAAAGA      240
AGTTCCAGGA GATGACTATA AGAACAAACT CATCTCGCA ATATCTGTGA CTGTAATACT      300
AATAATTTTG ATTATAATTT TTTGTCTTAT AGAGGTGAAT TCACATATGC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:838:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 540 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:838:

```
GAATTCGGCC TTCATGGCCT AAAAAATCTA GTTGAGAAAA AGAAAGAAAC CAAGAAGGCT      60
AATCACAAGG GTTCTGAAAA TAAAACTGAT TTAGATAATT CTATAGGAAT TAAAAAATG      120
AAAACCTCAT GTAAATTTAA GATAGATTCA AACATAAGTC CGAAGAAGGA TAGCAAAGAA      180
TTTACACAAA AAAATAAGAA AGAGAAAAAA AACATTGTTT AACATACTAC AGACTCTTCT      240
CTCGAAGAAA AACAAAGGAC ATTAGACTCA GGCACCTCTG AAATTGTGAA ATCTCCGAGA      300
ATCGAGTGTT CTAAGACAAG AAGAGAAATG CAATCAGTGG TTCAACTCAT AATGACAAGA      360
GACAGTGATG GTTATGAAAA CTCAACAGAT GGTGAAATGT GTGACAAAGA TGCTCTGGAG      420
GAAGATTGAG AAAGCGTTAG TGAATAGGA AGTGATGAGG AATCTGAAAA TGAAATTACA      480
AGTGTGGTA GAGCTTCAGG TGATGACGAT GGAAGTGAAG ATGATGAAGA GAAGCTCGAG      540
```

(2) INFORMATION FOR SEQ ID NO:839:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 539 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:839:

```
GAATTCGGCC TTCATGGCCT AGCATTTCAT CTCTAAATTG GGGAGAATAG AAGCATCTAC      60
TTCATGTAGT AGCCAGGATT AGAAGAGGGA GGAATAACTG GGCCCTGGAT AGAATGTGAT      120
GAATGTATAT TCTTAATGAG AAGTGGAAAT AATTTGTGGT TGAGAGCTGT GCCTCAGATC      180
AGAGTGACAG GATACATGGC TAGGCTATAT TTTCCAGCAG ATTAAGAGCT GCAGCCCAAG      240
ACTCTGAAAT ATGAAGAAAA AAGGAGAAGA TGACAGCATA TCTTTTAA GAAATATTTT      300
CCAGCCAAAT GGTGCAGCAG AGGACTTCCA GGAATTGTG CTTGTTCTGT ATCAAAGGTG      360
AAGAGTTTCT AGCCTTCAAG GAAACAAGAA ACCATGGGAT GGAGTGAAGG AAGGTGGCCT      420
GGAACCAAGT GCTGAGCCTC TCTGAGCCCC AGTTTCCTCG TCTCTAAAAT GGGGCTGATC      480
TCCTCTCCCT CAGACTGTTG TTGCAGGAAT TAAACAGGT GTTGAGTGGG CTGCTCGAG      539
```

(2) INFORMATION FOR SEQ ID NO:840:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 297 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:840:

```
TTCCACAGCT CTGATATTCA GTAACCCATG TGGAGAACAA AAGGATTTTG CTCCATGAAG      60
TCTAATTGCC TGCTGAATAA ATAAATAAAT AGATGAAGCA CTGCATGCAT TAAATGAAAG      120
TAAATATTGA CCCTGCCACC ATATGTTTGC TGGGGTGCTG GCTGAAGTGT GCTGGCAGGT      180
CCATCAGTC AGAGTCTGCC AGCCAGCAA GCAGGAGAGA CAGGAATATC AAAAAGGCGC      240
TCCTGCTTGT GCCTTAATCT TTGTCCAACC CCCAATTCCT CCACCACAGG CCTCGAG      297
```


(2) INFORMATION FOR SEQ ID NO:841:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 366 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:841:

```

GAATTCGGCC TTCATGGCCT ACCTTATTAG TGATTGGCGA TTCAGGCCAT GTCATAGGGC      60
CTTTCAGACA AAAGTTCTT ATCCCAGTCA GCTGGCCAAA ACATTAACCT TGGATTTCTT      120
ACCCTGCTAC AGCATCTTCT AGAAAGGCAG CAAGATAATA TTGTGGCAGT GCACAGATAA      180
CATCAGGGTA GACTTGACTG GAGAAAACCA AATTCTGCGC TTGCTCCTGT GTGCCCCCAT      240
CCAGCTGTGC ATGCACACAC AGGACACCTT TCTAGTATGA AGAACTTGCA TCATGTCTGC      300
CCTCTATTGA GCACCCCTT CTAGAAATAC TTCCAAGTAT TAGCATGTGA ACTGTTGACT      360
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:842:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 190 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:842:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCTG ACTTATGAAT TCTTCTGTG TGATCGTAAA      60
AGTGCAGAGT TTATTGCAAA GAGAATCTTC ATCTGAATCC TCAGCCTGGG AATCTTCCTC      120
TTCCACCGCC AACTCCTCCA CCCAGTCTGA GTCTACTTCA ATGGCCCGCT CTTCCCCATC      180
CGCACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:843:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 627 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:843:

```

GAATTCGGGC TTCATGGCCT AAGCTCCGCG AGCCCCCTAC AACTCGTTTC CTTCCGTTCA      60
CCTTCGCAGG GCGGCGACTG GCGGCGCGAT GGACCTGACC GGGCTCCTGC TGGACGAAGA      120
AGGCACCTTC TCCCTCGCCG GCTTCCAGGA CTTACAGTTC CTCCTCAGGAC ACCAGAAGCT      180
GAGTGCCCCG ATCCGAAGGA GGCTCTACTA TGGCTGGGAT TGGGAAGCCG ACTGTAGCCT      240
GGAGGAGCTC TCCAGCCCGG TGGCAGACAT TGCTGTGCGA CTGCTCCAGA AGGCAGCCCC      300
CAGCCCTATT CGCCGACTCC AGAAGAAATA CGTAGCTCAT GTGTCCCGGG AGGCATGCAT      360
CTCCCCATGT GCTATGATGC TGGCTCTGGT GTACATTGAA CGGCTCCGGC ACCGAAACCC      420
AGACTACTTG CAGCATGTGT CATCCTCTGA CTTGTTCTTG ATCTCCATGA TGGTGGCCAG      480
TAAGTACCTC TATGATGAAG GGGAGGAGGA GGAGGTCTTC AACGACGAAT GGGGAGCTGC      540
TGGGGGTGTG GCCGTGCCCA CTCTCAATGC CTTGGAGAGG GGCTTCCTGA GTGCCATGGA      600

```

TTGGCATCTC TACACTGAAC GCTCGAG

627

(2) INFORMATION FOR SEQ ID NO:844:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:844:

GAATTCGGCC	TTCATGGCCT	ACCTGAGCTG	CCGAAGCCGC	CGTCCTGCTC	TCCCGCGTGG	60
GCTTCTCTAA	TTCCATTGTT	TTTTTTAGAT	TCTCTCGGGC	CTAGCCGTCC	TTGGAACCCG	120
ATATTCGGGC	TGGGCGGTTC	CGCGGCCTGG	GCCTAGGGGC	TTAACAGTAG	CAACAGAAGC	180
GGCGGCGGCG	GCAGCAGCAG	CAGCAGCAAT	CTCTTCCCGA	ACACGAGCAC	CACAGGCGCC	240
CGAAGGCCGG	AACAGGCGTT	TAGAGAAAAT	GGCAGACGAT	ATTGATATTG	AAGCTCTAGC	300
TCGAG						305

(2) INFORMATION FOR SEQ ID NO:845:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:845:

GAATTCGGCC	TTCATGGCCT	ACCAGAAAAA	ACTTACATTG	AAGAGAGGAT	TCCTTGTTTT	60
GACTATGTGT	GTTTCTGCCG	TCTTAGGCAG	CCAACGTATT	GGTTACATG	GATCTGGAGG	120
ATTATGCACA	CTAGTGTTGA	GTTTCATTGC	AGGGACAAAA	TGGTCCCAAG	AAAAGATGAA	180
AGTCCAAAAG	ATTATTACGA	CTGTATGGGA	TATTTTTCAT	CCACTTCTTT	TTGGTTTAGT	240
TGGAGCAGAA	GTATCTGTTT	CATCGCTTGA	ATCAAATATT	GTTGGCATAT	CTGTTGCCAC	300
TCTAAGTTTG	GCATTATGTG	TTCGAATTTT	AACCACATAT	CTATTGATGT	GCTTTGCTGG	360
TTTTAGTTTT	AAGGAGAAAA	TATTTATTGC	TTAGCATGC	ATGCTCGAG		409

(2) INFORMATION FOR SEQ ID NO:846:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:846:

GAATTCGGCC	TTCATGGCCT	AGGCACGGTA	CATACGATTA	TTATAAACAT	CAGCTGCGGT	60
TCTGGGAGTG	AGCTTGTC	GTGTTAGTGC	CATCTCCCTG	ACAAATCTGA	CCTGTACCCA	120
CATCTCAGGC	TGGGAAGGAG	TAGCTGGGCC	TCCCTTTAAT	GCAGCGGCAC	TGGTTGGGT	180
CACAAGAGCT	GGTTTGATCA	ACCCCTGACT	CCCCCTGGCG	GGAGGTGCTC	GTCACATCTG	240
GGAGCCTGAG	CAGAGGTGCC	GGGGGCTTGG	AAGCTGGAGA	AATGATGGAT	CTTTCTCCAG	300
GAGAAACAAT	TCTTATCTTC	ACATCNGCCC	CGTGCTCCAA	ATGAAGAGCG	CGTTTGATA	360

GCTGCTCGAG

370

(2) INFORMATION FOR SEQ ID NO:847:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:847:

```

GAATTCGGCC TTCATGGCCT ACGCGCGGCC GAGCGGAGGC GGAGTCGGCG CCGAGAACAT      60
GGCTGGAGGC AAAGCTGGAA AGGACAGTGG GAAGGCCAAG GCTAAGGCAG TATCTCGCTC      120
ACAGAGAGCT GGGCTACAGT TTCCTGTGGG CCGCATCCAC AGACACTTGA AGACTCGCAC      180
CACAAGCCAT GGAAGGGTGG GTGCCACTGC TGCCGTGTAC AGTGCTGCGA TTCTGGAGTA      240
CCTCACTGCA GAGGTGCTGG AGCTGGCAGG TAATGCTTCT AAGGATCTCA AAGTAAAGCG      300
TATCACTCCG CGTCACTTGC AGCTTGCAAT CCGTGGTGAT GAAGAGTTGG ATTCTCTTAT      360
CAAGGCTACC ATAGCTGGGG GTGGTGTGAT CCCTCACATC CACAAATCTC TGATTGGAAA      420
GAAGGGACAG CAGAAAAC TGTTAGAGGGA TGCTTTAACC AACCTCTTCC TTCCCCGTCA      480
TTGTACTGTA ACTGGGACCT CGAG                                         504

```

(2) INFORMATION FOR SEQ ID NO:848:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:848:

```

GAATTCGGCC TTCATGGCCT AAACAAGCAG AGGGACTCCC CAGATAGCTT CATACCCAGT      60
TTAGCTTTAT AACAAGTGTA GTTTTAGGCT CTGTCTTGCC ATACTTGAGA GCACAATGGC      120
TGCTTCAAAA CAGGCATTG AACTCGCTGT TTAATCAAAT TCTTCTTTAA TCTAAAGTGA      180
GTTTCTCATA GAGAGCATAT ACACTTAACC CTTGAACAAT GTAGGGGTG GGTGGGGGAG      240
TCAACCCCT GTGAAGTAA AATTGCTAA TAACCTTTGA CTCCCCAGA ACTTAACTAT      300
AAATAGCCTA CTATTGATTG GAAGTGTTAC CAACAGCATA CACAGTTAAC ATATATTTG      360
TATGTAATAT GTGTTATCCA CTATATTCTT ACAATAAAGT TAGCAAAAGA AAAAAATGTT      420
ATTAGGAATC CTCGAG                                         436

```

(2) INFORMATION FOR SEQ ID NO:849:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:849:

```

GAATTCGGCC TTCATGGCCT ACATGAGCCC AGGAGTTGAA GGCTATAGCC TGGGTGACAC      60
AACAAGGCCC CATCTCTAAA AAATATATAA ATAAATAAAG TTAAGGATGC TGCCTGGTTT      120

```

ATATGTTTCAG	AAAGAGATTG	AGGTAATAAA	AGAGTTTTTG	GCCAGGCTCT	GGCTTACACC	180
TCGGCCTCCC	AGAGTGCTGG	GATTACAGGC	ATGAGCCACC	GCGCCAGCC	GGAAGTAGGT	240
TTTTTGAAGA	GTCAGCTGAA	AACAACGTGT	GCCGTATTCTG	GAATTAAAA	TTTTAATTG	300
AAAAATATTAT	AACTGAGAAA	TTATTGTATA	TATTTATGGT	ATACAGCGTG	ATGTTATGAT	360
ACATGTATAC	AATGCAGAA	GATTAAATCA	AGCTATTTAA	CATAGCTGTC	ACCTCAAATA	420
CTATTTTTGT	GGTCAGAAAT	TTGAAATTA	TTATCTCAGG	AATTTTGAA	TGTACAATAC	480
ATTATTATTA	ACTGTTCTCG	AG				502

(2) INFORMATION FOR SEQ ID NO:850:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 291 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:850:

GAATTCGGCC	TTCATGGCCT	AGATAAAAAG	AAACAAAAAA	GAGAAGATAT	GATAAGAGAA	60
CAGAAGATAT	ACCATAAATA	TTTGGCACAG	AGACGTGAGG	AAGAAAAAGC	TCAGGAGAAA	120
GAATTTGACA	GAATATTAGA	GGAAGACAAG	GCAAAGAAGT	TGGCTGAGAA	GGACAAGGAG	180
CTGAGACTTG	AAAAGGAGGC	AAGGAGACAG	CTTGTGGATG	AGGTCATGTG	TACAAGAAAA	240
CTTCAAGTTC	AAGAAAAGTT	GCAACGAGAA	GCTAAAGAAC	AGGAACTCGA	G	291

(2) INFORMATION FOR SEQ ID NO:851:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 311 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:851:

GGTCTGTAT	TCTGTTGGTT	GGAGTGTCT	ACTATTGTTG	GGTGGAGTGT	TCTATCTTCT	60
GTTGGGTGGA	GTGTTCTGCT	GTTGTTGGGT	GCGGTGTTGT	ATATTCTGTT	GTTGGGTGGC	120
GTGTGTATA	TTCTGTTGTT	GGGTGGCGTG	TTCTATCTTC	TGTTGTTGGG	TGGATGGATT	180
GTTCTGTATT	CTGTGGGTG	GCATGTTCTA	TCTTCTGTTT	TTGGGTGGAG	CGTTCTATCT	240
TCTGTTGGGT	GGCGCATTCT	ATATTCTGTT	GTTGGGTGGC	GTGTTCTGTA	TTCTGTTGTG	300
GGTGGCTCGA	G					311

(2) INFORMATION FOR SEQ ID NO:852:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 532 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:852:

GAATTCGGCC	CTTCATGGCC	TAGTCTCATC	TCAGAGTACT	CAGAGAACT	ATTTTTTAAT	60
CTCTAGATAT	CAATCAATGA	ATATTTATTA	TTAAATACCT	GCTATGTGCC	AGATGGTGTT	120

```

AATTATAAGT TTGTTCTCTT TTTGTCGTGC TACTTAGGCT TTTATCATTT TGTCCTATCA      180
TTAGGGAAGT GGCTCCNNNN CTTACAGCTA ATTTTTTTTT CAATTTACTA ATGACTTTTT      240
GTGGAGGTGG GGATCTCTTC TGTTCACAT TTTCTATGAT TCATCTCAAT CCTCCAGTGA      300
TTATTAAAAA ACAGTTGCAG TAAGTTCAGT CATAGGGGCA CTGGAATGAG TCCTTAAAC      360
TTTATGCTGC TGCTTTTGCA ATGATGGATT GCCTGAGAAT TAAGGAAAGA TAACTACTCT      420
CTTGGTCACT GTATTTCOA TCAACCATAT CCTCCAGAA TATGATTCT TCCCTCAGGC      480
ATTTTAGAAA AGAGACAAGA GACAGATTT TTTTTCAGG CAATGACTCG AG      532

```

(2) INFORMATION FOR SEQ ID NO:853:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:853:

```

GAATTCGGCC TTCATGGCCT ACTTTTGAT AAGCAACTAG TGGTCTCATT ATCAGAGGTC      60
CCTGAGGGGC CCTACAGGCC CCCCAGGTT CTGCCCCCAA GATTCTAAGA GAGACCTTGT      120
GCTAGGGCTC TAGTCTTGAT GTTCTTTGCA TTGTTTGGAT ATGAAGCCCA GGATATGTGG      180
GCACAATAAG GTAAATCATG AGATGTGAAG GAGAATGAAG ATCAGGCCAG AGGTCACCAT      240
TCATTGAAGA GCCAGAGAAA AAGAAAATTA GTGCACAGAT TTGTGTAGAT TTACAGAGAA      300
CTTCTATTTG CTGCAAGAAC TTCATCAGGC GCTGCACCAT GCCTGATTG GAAAGGAGCT      360
TCTTTGGGGC CTGATAGAAC TGAATTAATA TGAAGAAATT GAAGTGGCTC TCGAG      415

```

(2) INFORMATION FOR SEQ ID NO:854:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:854:

```

GAATTCGGCC TTCATGGCCT AGTAAAATTA GCTGAAAAAT AATTTTCAA TGCAAATACT      60
AATGAGGGTT ATATGACCGT TGTCCAAAGC ATTGTCAGTG CTGCATGACA TTTGTCCTAA      120
AACCTGACTC TTAAACATT CCTTGTGAAA ATAGAAATAT TCCCATGCCT AGATTCCAAA      180
TAATAAAGA CACTGAGAGT GTTTTCAAAA TTAATGGACT GATTAAATT TCACTGGAAA      240
GCAGCTTTTT AAAACTAAAT TGTCTGGATG TGGCCTCCCT GTGATCACTT CCAACTGCTT      300
ACTGCCAACT TCTGGCGGCT CGAG      324

```

(2) INFORMATION FOR SEQ ID NO:855:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 616 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:855:

```

GAATTTCGGCC TTCATGGCCT AACGGCCTTC AGATGGAAGG AGGGCAGGTG CATATCTGTT      60
AGCAAAATCT TCACAATCAT CTTGAGTTTC TCAGCAAAGT CGGCCTGGCT GGAAATTCCT      120
GGCGCTGCCA TGCTGAAGGT GACCAGCAAC ACAGCCCCCA GGATGGTCAG TTGTTCCAGC      180
TGCAACTGGA GCTCGTGGAA GCGAGACTGG TCCATTAAAA CTGTTTCGGG GAACGGCCTC      240
TGGAGGTGGT CCCACTTCAG AAGCTTCAGG TAAGCGTAAT TCTGGACAGC AACAGGGCTC      300
AGCCTGGGCA TGTCCCCAGA GCCAGCAGCC ATTCCCCCA CTGGCAGGGC GTGTTTATAC      360
TTCTGAGTCA TAAGTCTCTC TGAGGCTTCT TCCAGCCACT GGGTGACAAA GTCCAGGGAA      420
TTTGGTTGCC TCTCCAAAT CTCTTGAAC TTCTTCCTTT CGTATTCAAC TGA CTGCTGC      480
ATGAGATGAG GCCTGATGCT ACTGATAGCA AAGTTGGCCA TGTCCACTTT CATTAGGTCC      540
AACACAGAAA AAATTTCTCT GAAAAGGGGC ACTATTCCTT TAATGTCCTT TAGTTTCTTA      600
ACTTCCTCAT CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:856:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:856:

```

GCTCTGGGTG AAAAGATCTC ACACCAATGT ACATAATGTG GCCATCCTTT CCATTTTCAA      60
GAAGTTGCCT TGCTTTGATA CTGCAAATTC AGTATTTGTA CACTGGAATG ATAAAAAGAT      120
GTTCCACTTT CTTTTCAGCC AGAAAGCTTC CTCGTTGTGT GTGTGCGTGT GTGTCCCATC      180
CTATTGCCTG TTCTTTCTAA ATCTACATT TGTACCTTA TCCAATACTT GCTTTAGCAA      240
GAACATTATG GGGCCACCA TATTCACAG GGCCATGCCA ACCTTTGGAA AAAAGGTAGG      300
TCAAGGAAGA AATCAGAACA AACCCTGTGA CCATTCCACC TCCTTGCA TC TTGGGCTTGG      360
GTTTGGAAC TGACCAGCAA GCTGGAGCTG CCACCACAGA GAAACATCAA AGCAAAAGGG      420
TTCCAGGACC AGAGATTAGG TAACTAGCTA CAGGCCAGAG GAATGCTTCC CTCTCTAGAT      480
CAACAAGCAC CCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:857:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:857:

```

GTTTCATGGCC TAGATGCTGG TTTGTTTTTG TTTTCGTTTT TTTGAGACAG TCTTGCTCTG      60
TGACCCGGGC TGGAGTGCGAG TGGTGCGATC TCGCTCATTG CAACCTCTGC CTCCCAAGTT      120
CCAGCAAGTC TCCTGCCTCA GCCCCCACC GAGTAGCTGG GACTACACGC AAGTGCCACC      180
ACGCCCAGCT ACTTTTGTGTA TTTTGTAGTAG AGATGGGGTT TCACCATGTT GGCCAGGCTG      240
GACTCGAATT CCTGACCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:858:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:858:

```
GAAACTATAA TCATCAGTAC TGTAATGAGC AATTATGAGG CCTACAAGCC TTCCACAGGA    60
GCTATGGGAG ATCGACTAAC GGCAATGAAA GCAGCTTTCC AGTCACAGTA CAAGAGTCAC    120
TTTGTTCGAG CCAGTTTAAG TAATCAGAAG GCTGGAAGTT CTGCTGCTGG GGCAAGTGGG    180
TGGACTAGTG CAGGGAGCTT GAATTCTGTT CCAACTAACT CAGCACAAACA GGGCCATAAC    240
AGTCCTGACA GCCCCGTCAC CAGTGCCGCC AAGGGCATCC CAGGCTTTGG CAATACTGGC    300
AACATCAGTG GTGCCCCTGT GACCTACCCG TCTGCCGGAG CCCAAGGAGT CAACAACACA    360
GCTTCAGGGA ATAACAGCCG AGAAGGGACT GGGGCGAGCA ACGGGAAAAG AGAGAGATAT    420
ACTGAGAACC GGGAACTCGA G                                441
```

(2) INFORMATION FOR SEQ ID NO:859:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:859:

```
GAATTCGGCC TTCATGGCCT ACTGGTCGCC AATGTGCTGC AGGTCATGGC TCCGGAATCA    60
AATTGGGCTC AAACGGGGCA AGCTCCAACA CAGTGGAGCC TGGCGCTACT CCCACCTCCA    120
CCTTGCAGAT CTCAGAGCTG CAGGATGGCT CTGCCCACCG CACCCTGAGC TGCCCCCGCT    180
TGGGGCTGGC ATTGGGGGAC AGTGTGTTCT GGGCGTCTCT GCTCCTCTCT GCTGGTGCTC    240
GTGCTCTGTC TGGCCGCCCA CTCATAGATG TCAGAGCCAC AGGACGGCCC CGCAGAATCC    300
CTGCGCCGAC CCTGCCGGGG GCTGGCTTTG GTGCACATGC AACTCGTCAT CGTGGTCCCC    360
ATGGGCACCT CTGCTCTTCT CGAG                                384
```

(2) INFORMATION FOR SEQ ID NO:860:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:860:

```
GAATTCGGCC TTCATGCCTA CGTTTCCCGA GAAACCAAGC CACAAAAAGT ACAGGGCCCGC    60
CCTGAAGAAG GAGAAACGAA AGAAACGTCG GCAGGAACCT GCTCGACTGA GAGACTCAGG    120
ACTCTCACAG AAGGAGGAAG AGGAGGACAC TTTTATTGAA GAACAACAAC TAGAAGAAGA    180
GAAGCTATTG GAAAGAGAGA GGCAAGATT ACATGAGGAG TGGTTGCTAA GAGAGCAGAA    240
GGCACAAGAA GAATTCAGAA TAAAGAAGGA AAAGGAAGAG GCGGCTAAAA AAACGGCAAG    300
AAGAACAAGA GAGAAAGTTA AAGGAACAAT GGGAAGAACA GCAGAGGAAA GAGAGAGAAG    360
AGGAGGAGCA GAAACGACAG GAGAAGAAAG AAAAAGAGGA AGCTTTGCAG AAGGGCTCGA    420
G                                421
```

(2) INFORMATION FOR SEQ ID NO:861:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:861:

```

GGATTCTTT GGAATGGGCA AAGAAGTGGG GAATCTGCTA CTGGAAACT CACAGCTTCT      60
GGAAACCAAA AACGCCTTGA ATGTGGTGAA GAATGACCTG ATTGCCAAGG TCGACCAGCT      120
GTCCGGGGAG CAGGAGGTGC TGAGGGGCGA GTTGGAGGCT GCTAAGCAGG CCAAAGTCAA      180
GCTGGAAAAC CGTATCAAGG AGCTGGAAGA GGAAGTGAAG AGAGTGAAGT CCGAGGCCAT      240
CATCGCCCGC CGTGAACCCA AAGTTCTCGA G                                     271

```

(2) INFORMATION FOR SEQ ID NO:862:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 288 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:862:

```

GCGGCTCTTT GGGAGGTGGT CAGGGGAAAA GATGGTCAGT GCTTTTCTG GACAAATCCA      60
GGGGCCAATT GAGGTGGGGA GTCTATGAGA AGGGCCCTGT CAGCTGAGGC GAGGGAAAGG      120
GCAGAGGACC TAGAATAAAA GGATATGGCC TCTCTGTGCA CTAGCAGGAT GGGTAGGAAA      180
GGGAGATATG AAAAGACGAA ATGGGGACCG GGTGCGGTGG CTCACGCCTG CAATCCCAGC      240
ACTCTGGGAG GCCAAGGCAG GCAGATCACC CGAAGTCAGG AGCTCGAG                                     288

```

(2) INFORMATION FOR SEQ ID NO:863:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 326 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:863:

```

GCTCGAGTGG AATGGGCCGA GGAGATGGAT TTGATTCTCG TGGCAAACGT GAATTTGATA      60
GGCATAGTGG AAGTGATAGA TCTTCTTTT CACATTACAG TGGCCTGAAG CACGAGGACA      120
AACGTGGAGG TAGCGGATCT CACAACTGGG GAACTGTCAA AGACGAATTA ACAGAGTCCC      180
CCAAATACAT TCAGAAACAA ATATCTTATA ATTACAGTGA CTTGGATCAA TCAAATGTGA      240
CTGAGGAAAC ACCTGAAGGT GAAGAACATC ATCCAGTGGC AGACACTGAA AATAAGGAGA      300
ATGAAGTTGA AGAGGCTCTT CTCGAG                                     326

```

(2) INFORMATION FOR SEQ ID NO:864:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 546 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:864:

```

GGAATGGGGA GAGGGATCTA CCAAGGTNAC AGCAGTTTTT TGAGCAGCTG GCACGTGCCT      60
CTGCTGCCAA CATGATGAGG TACAGAACCC AGCACAGGGA ATGCTCAGCC TGTGACTGTG      120
AGCTGGATGT GAGAGTCTCC TGAGGACCCT CGGTATACTC AGAGCATTTC CTCTCAGGGT      180
GCAGGAAGAG GAAAGCAGAG GAAGTGGA CTGAGGACCA AAGGTGGGAT CCTAGCTGGG      240
CCAATCACTG AGAAGCCATG TGGTCTTGGG CAAGTCATTC CCTTCTCTGA GCCTCAGTTT      300
CCCCATCTGT AAAATGGAGG TAATGATACT ATGCCTACCT CATCATCATG CTGTGAAGAT      360
TAAATGAGTT ATGCCATGGA AGTGCTGTAC ATTACCCATT GATAATGTCT CAGTGGCCTC      420
TCAATGAAAT GGAGTGTGAC AGAGTGCCAC ACTCTGAAAC GGCTCATCCC CGGTGATGGT      480
GCTGGGACTA GAACCGGGC AACCTCGCAG TGCCATGCCC TACTGCATCA CTACGTCCAC      540
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:865:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 808 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:865:

```

GAATTCGGCC AAAGAGGCCT AAGGATTCAT AGTATAAATC TTTAATTTAT CACAGTCTGT      60
ATTAAGTAAT ACTAAACCAC TTCGCATATA AATACATCAC AACAGTATAC TTCCGTTTAT      120
GCTATCTTGG TCTTTGTA CTGTTTCTTTG TACATTTTAC TTTGGCATAA ATGTCAAAGT      180
ACAGTATTGT TATTTAGCTT TAAATATTCA TTTGCCTCTC TCCTTAATGT AAAAAGGCTT      240
CTTCTCAACT TCCTGACATT TCTTGCTAAA CTATACACGT CTGCCCTGTT TTCCAACAGC      300
ACACTGTTCT GTACTGTCCC TTATTTATTT TTTTTTTTTT TTTTTTTTGG AGACGAGCTC      360
GTTCTTTGCC CAGGCCGGAC TGCAGTGGTG CTATTTCCGC TCACTGCAAA CTCTGCTTCC      420
CGGGTTACCG CCATTTTCCG GCTTCAGCTT CCCGAGTAGC TGGGACTACA GCGCCCCGCC      480
ACCACGCCCG GCTAATTTTT TGTATTTTGA GTAGAGATGG GGTTCCTCCG TGTTAGCCAG      540
GATGGTCTTG ATCTCCTGAC CTCGTGATCC GCCCACCTCG GCCTCCCAA GTGCTGGGAT      600
TACAGGCGTG AGCCACCGCA CCTGGCCTAT TCTGTCCCTT TTTAAAGCAG TTCTCTTTTA      660
AAAAATTGTG GTAAGATATA AATCACATAA AATTGTCAGT TATAACCATT TTAAAGTATA      720
TAATTCCATG GCATTAATTA CAGTCACAGT CTTTACAAC TATTATTACT ATGTATTCTT      780
AAAGTTTTTT TACCCTCCCC CCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:866:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:866:

```

GAATTCGGCC TTCATGGCCT AAAAGAAAAT GGCTTCAGTA AGTTAGGATG AAAAATGAAA      60
ATATAAAATA AAGAAGAAAA TCTCGGGGAG TTAAAAAAA ATGCCTCAAT TTGGCAATCT      120
ACCTCCTCTC CCCACCCCAA ACTAAAAAAA GAAAAAAGG TTTTCTAATG AAAATCTTTA      180
AAAATACTGT CAGTATTTTA AAATTTTCAA CAGTATTATA AAAACATTGC ATCTCCCCAC      240
CTCTAATATG CATATATATT TTTCTGCTA AAATTGGTTT CTACAATTGA GTAAATGGCA      300
AATACATGAA GCAATGTCCC TAAATTTTAT AAAGAAATTA TATTTAATGC ACATTCTCGA      360
G

```

(2) INFORMATION FOR SEQ ID NO:867:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 880 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:867:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGAAAA    60
CAGTCTTTTA ACCTTTCAAA ATGCCACAAT GTGCATTTTA GATTGCCCTT AGTTTCCCAA    120
CTCTCAGTAT ATAGAGACTC AATTAGAAAA GAAATGGTGC TAGTAGCTTC AACCCACTGG    180
TATGTATTTG AGGAACTGTT CCTGGTAGAA GGCAGTACCG TGTCCCTTGG TATTGCTACT    240
GTGCCTGCTA TGTTACTTCT TTATGTATAT GATATGGAAG TAACTCCTTT TATACATGTG    300
GAGAAGTTTC ACAGCTTTTT TTCATAGTCA TTGCATTAAA ATGTCTGCTG AGGCTGGGTG    360
TGGTGGCTTA CGCCGGTAAT CCCAGCACTT TGGGAGGCCA AGGTGGGTGG ATCACCTGAG    420
GTTGGGAGTT CAAGACCAGC CTGACCAATA TGGTGAACT CCGTCTCTAC TAAAAATACA    480
AAAATTAGCT GGGTATGGTG GCGCACACCT GTAATTCAG CTCCC GCCGG GCGACTCGAC    540
CAAAGAGGCC GGAATTTGGC CCTCGAAGCC AAGAATTCGG CACGAGGGGT ATTTTATT    600
TTANTTNTTC TGTTTCTCTC TNGAGTGTAT AGTGTAGAGG GGGTTTCTGT CTTGAGTGTA    660
GGCCTGGAGA TTTCCCTTAT ATGGTACAAA CCAGCAATGA ATTAAGAGGT CTCTTTTCTC    720
CAAGATCTAG TGTTTGTAC TAGGAGAACT CTAAAAAGTA TCTATTTTAC TGTAGTGCCA    780
AAGTACAAAT TTATTTGGAT TTATTTTGTG CCATCTTATT TTTTAATATA TTTCTTTTTC    840
TATGTTGTGC TTCTTCCCA CCTCATCTCT CCTCCTCGAG    880

```

(2) INFORMATION FOR SEQ ID NO:868:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:868:

```

GAATTCGGCC TTCATGGCCT AGTCATGGCT TTAGAATCTG GAGAAGAGTC TGACTCACTT    60
CTTTCCTGAG GGGATGCACT GGGTTTCACA TCAAGTTCTT GAGAGGATCC CGAACGACTT    120
CTCTGCCCCA GGGGAGTCCG AGCCACAGTT TTCTGATCAA CTGATGATTC TGACCCGCTT    180
CTTCTCTCTT GGGGGGTAAG ACACTTGTTG TTGAGCTCTG GGGATGATGG AGAACGACTC    240
CTCGGCCTAG GAGTCTGAGG CAAAGCTTTC GGTCTGTTGG AAGAATCACA TTCGCTTCTC    300
CCTCTAGATG GCGTTCTAGG TATATCTTTC ATTCCAGGAG AGGACCCAGA CAGGCTGTGC    360
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:869:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:869:

GAATTCGGCC	TTCATGCCTA	GAGGATCTTC	TCCTGACCCA	GCATCGCTCA	TCACAATGAA	60
GAACCAAGAC	AAAAAGAACG	GGGCTGCCAA	ACAATCCAAT	CCAAAAAGCA	GCCCAGGACA	120
ACCGGAAGCA	GGACCCGAGG	GAGCCCAGGA	GCGGCCAGC	CAGGCGGCTC	CTGCAGTAGA	180
AGCAGAAGGT	CCCGGCAGCA	GCCAGGCTCC	TCGGAAGCCG	GAGGGGGCTC	AAGCCAGAAC	240
GGCTCAGTCT	GGGGCCCTTC	GTGATGTCTC	TGAGGAGCTG	AGCCGCCAAC	TGGAAGACAT	300
ACTGAGCACA	TACTGTGTGG	ACAATAACCA	GGGGGGCCCC	GGCGAGGATG	GGGCACAGGG	360
TGAGCCGGCT	GAACCCGAAG	ATGCAGAGAA	GTCCCGGACC	TATGTGGCAA	GGAATGGGGA	420
GCCTGAACCA	ACTCCAGTAG	TCAATGGAGA	GAAGGAACCC	TCCAAGGGGG	ATCCAAACAC	480
AGAAGAGATC	CGGCAGAGTG	ACGAGGTCGG	AGACCGAGAA	GCCCTCGAG		529

(2) INFORMATION FOR SEQ ID NO:870:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:870:

GAATTCGGCC	TTCATGGCCT	AATTTGAGCT	TCAAGTCTCC	ATGTGTATAA	TGTGGGGTTG	60
ATGTGTGGT	GCTCCAAGGT	GTGGGGGGT	TTTAGGCAGA	GTTCTTATGC	TTAATATAGG	120
ATGGAAGAGT	GTTGAGCTT	CTTCCCTTTT	CTCTTTCTTC	TCTTCATCTG	ACATGAGCCT	180
GGGGTTCTAC	CTCTTCCAGA	TAATTCATCC	TGGAGTACT	AATTCTATCT	CCCCATTGAT	240
TTTAGTGTCC	TGTCTGTTTC	TAAATCTACT	GGGCAGTTGG	AGACATTGTC	TTTTGTTCCT	300
TCATCTATCT	TCTGTATCCA	CAGTTGATAA	TTGTCTATGT	TTTTAGTGTG	TTTTAAGGAA	360
ACTAGTCTCG	AG					372

(2) INFORMATION FOR SEQ ID NO:871:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:871:

GAATTCGGCC	TTCATGGCCT	AGGTGGTGGG	TGCCTGTAGT	CCCAGTACT	TGGGAGGCTG	60
AGGCAGAAGA	ATTGCTTGAA	CCCGGCAGGC	AGAGGTTGCA	GTGAGCTGAG	ATCGTGCCAC	120
TGCACTCCAG	CCTGGGTGAC	AAGAGTGAGA	CTCTGTCTCA	AAGAAAAGAA	ACAAAAAATT	180
ATGTACACAA	ATATGGACAG	CCTGGCAAG	AAGTGTGGCA	AAAACACATG	TGGTTCTCTT	240
GTTTGGGGCT	CAGACATGTG	GCTGTGCCAT	TACAGACCCC	CGGGATTAG	AATCCTCCTT	300
CTGAAAGGCG	TCCTGTGCAC	TCGTGAGCAC	CAGCCTGAAC	AGATGAAAAG	GCTGAGCTGG	360
AGGGGCTGGG	ACACAGCCCA	CCTTGACGAC	AGCTGCTCCT	GGCTGTGCGG	GGGGGTCTCC	420
AGGAAAGGCC	ATTCTCCAC	TAGGATCGCC	AGGCCCTACT	GAGGCTCAAG	CTCCTTTGCT	480
GTTTGGAATC	TTCCCTCCCC	AGCCCCCAG	CCTCATCAAA	GGCTGCCTTT	TCCTGTTTAC	540
TGACCACAGC	TGCTTTGACT	CCATTAGCCT	CGAG			574

(2) INFORMATION FOR SEQ ID NO:872:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:872:

```

GAATTCGGCG TTCATGGCCT ACCAGACTAC TACGGACTCA TCTAACAAAA CAGCACCGAC      60
TCCAGCATCC AGTGTACCA TCATGGCTAC AGATACAGCC CAGCAGAGCA CAGTCCCCAC      120
TTCCAAGGCC AACGAAATCT TGGCCTCGGT CAAGGCGACC ACCCTTGGTG TATCCAGTGA      180
CTCACCGGGG ACTACAACCC TGGCTCAGCA AGTCGCAGGC CCAGTCAACA CTACCGTGGC      240
TAGAGGAGGC GGCTCAGGCA ACCCTACTAC CACCATCGAG AGCCCCAAGA GCACAAAAAG      300
TGCACACACC ACTACAGTTG CAACCTCCAC AGCCACAGCT AAACCTAACA CCACAAGCAG      360
CCAGAATGGA GCAGAAGATA CAACAAATTC TGGGGGGAAA AGCAGCCACA GTGTGACCAC      420
AGACCTCACA TCCACTAAGG CAGAACATCT GACGACCCCT CACCCTACAA GTCCACTTAG      480
CCCCGACAA CCCACTTCGA CGCATCCTGT GGCCACCCCC AACTCGAG      528

```

(2) INFORMATION FOR SEQ ID NO:873:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:873:

```

GAATTCGGCC TTCATGGCCT AAGCTGCACA AAACGTAGAA AGAAGACATA GCGCCTGCCA      60
GGGGAATAGG AAATGAGGCG ACTTACACAT TAATGTGAAT TAGTAATTGT GGTATAGAAA      120
TGTTTTATAG TGAAAGATTC AAATTGCTT TTCAAGAAAA ATGCCAAAAG CTATTTAAAT      180
AATTCGAGGT TACATCGTAG GTTTGATTT TTCTCAATTT AAGATACAGA AATACAGCAA      240
GCCTTAATAT AAAGTTTCCT AAAGTTTCTT CAAGTATTTT TTAAGGTGGA GAAATGCAGG      300
AATTGTATAA CCAGAATTGT TTCTGCCTTT AGCTTTTCAG AACTTGAGAT GTGGCAGCAC      360
TGGACTGGGT TTTTTTAAAT GTTAGGACTA GGAATGTTTG CTCTTGTTAA TTATGAATTA      420
ATTGATTATT AAGTTTAGAA TGCATTTTAA CAAGTATCTA ACTATCAAAT TGTGTTTAGT      480
AACTTGAGTG TATGCACAAG TTTGATCAAC AGCAAAATAG AGTTCTGAAT TTCCTTTAAA      540
GTGATGATAT ATTATTTTGT GAAACTTGT GTTTGAAAAT GTTTATTCTT GTTTATGGTG      600
TAATACTCGA G                                     611

```

(2) INFORMATION FOR SEQ ID NO:874:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:874:

```

GAATTCGGCC TTCATGGCCT ACGAGCGGTG AAGGAGGAGA CCAAGGAGGA TGCTGAGGAG      60
AAGCAATAAA TCGTCTTATT TTATTTTCTT TTCCTCTCTT TCCTTTCCTT TTTTAAAAA      120
ATTTTACCCT GCCCTCTTTT TTCGGTTTGT TTTTATTCTT TCATTTTAC AAGGGACGTT      180
ATATAAAGAA CTGAACCAA CATTGAGGTT GTTTTTTTTT TTGTTTCTAA GTTTTTGCCC      240
TATTGAAGAT GACTTCAGAA AATCCATTCC CCAGTCATGA AAATGTACTG TGCTATTCTC      300
GAG

```

(2) INFORMATION FOR SEQ ID NO:875:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 348 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:875:

```
GAATTCGGCC TCATGGCCTA ACGGCAGCGG CAGCCTCTGA AAAGAATCGG GGCCCAAGAA      60
AAGGCGGTCTG TGTTATCGCT CCCAGGAAGG CGCGCGTCGT GCAGCAGCAA AAGCTCAAGA      120
AGAACCTAGA AGTCGGAATC CGGAAGAAGA TCGAACATGA CGTGGTGATG AAAGCCAGCA      180
GCAGCCTGCC CAAGAAGCTG GCACTGCTGA AGGCCCCAGC CAAGAAGAAA GGGGCAGCTG      240
CCGCCACCTC CTCCAAGACA CTTTCCTGAG GACGCTGGCC CCAGTGCAGG CCAACATCCC      300
ACCCCTACC TCCATATGGG ACCTTGCAAG TCATCCCACT TCCTCGAG                      348
```

(2) INFORMATION FOR SEQ ID NO:876:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 586 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:876:

```
GAATTCGGCC AAAGAGGCCG GAATTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGAGAC      60
TATTTTCCAT TTCACACAAG AAATCTTTGA TTATTCAGTA AAAAGAGGAA ATATAAGAAA      120
AAAAATCAGA CTAGTCTGGC CAACATGGTC TAAAATACA AAATAGCCA GGCATGGTGG      180
CGGGCGCCTG TAATCCAGC TACTTGGGAG GCCCAAGCAG GAGAATCGCT TGGACTCGGG      240
AGGCGGAGGT TGCAGTGAGC CGAGATCATG CCACTGCACT CCAGCCTGGC AGACAGAGCA      300
AGACTCCCTC TCCAAAAAAG TTAAAAA AAAAGAAAAA AAAGGCCGGG TGCAGTGGTT      360
CGGCCTCCCA AAGTGCGGGG ATTACAGGCG TGAGCCACCA TGCCCGGCCA CTTTCTGTAT      420
TTTTTAATAA ATAAGAAATA CACATTAGT AGTAGTTACA AAGATCTGTA GGCGTAGCA      480
AATATTCAGT AACTGGAAGA TGCCAATGAA CATTGTTGGG TAGTATTTAA ATAACAAAAT      540
GTTCAAATAT TTGACAAGAT TAACAACACT ACACGGCCTT CTCGAG                      586
```

(2) INFORMATION FOR SEQ ID NO:877:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 445 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:877:

```
GAATTCGGCC AAAGAGGCCG GAATTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGTAA      60
TTTTAAAAAT TTATGTATTT TCTAGCATTT GCCTCAAGGA TTGAAATTTT TTTTCTTACT      120
TGTGTTTACA GGTAGAATTC TTTATTTAAA AAGTCAGTTG AATATCAAAA CTATTTGATA      180
TTCTTCAGAC TGAATATTA TTCTCTAGTG TAGAAGAAAA CATTTCTGTC TTACAAAACA      240
AATAGTAAAT ACTCTAAAT AGGGGTGGC AAACTTTCT TAAATAAAG GCCAGATGGT      300
AACTATTTTA GGTTTTGTGG GCCATGTGTT GATAACTATT TTAGGTTTGT TGGGCTACGT      360
ATGGGGTCAC TCTCCATTC TCTCTCTCTC TCTCTCTCTC TCTCTCTCTC TCTCTCTTTC      420
```

TGTGTGTGTG AGCGGCGCTC TCGAG

445

(2) INFORMATION FOR SEQ ID NO:878:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:878:

```

GAATTCGGCC AAAGAGCCGG AATTGGCCCC TCGAAGCCAA GAATTCGGCA CGAGGGGGTC      60
TCCATTCCCC GAGAAGCCAG GGGCAGGGTG GGATGGGGAA GACCAGGAGC AGAGTCGAGC      120
CTCACAGAAG CCAGCGCGGJ TCTCTGCTCA GCACCCAGC CGGGGCTCTG GACCCAGGGT      180
AACAGCCCCA GTTCATCCCA ACCCCTCTCA GAGCCTCAAG AGGGGTAGCT CGGCTGCCCG      240
AAGAGAGGGG TGCCCTATCC CTGGCAACCC CTCCACGTAG CGTACCCAG CACCTGCCAC      300
CGCCTTTGCC ATTTCTTTGA GCTTGAAGTT AACTCTCTTA GAGTCTAACT TTGGTTCATT      360
TCTGCACAGG TACAATAGAT GACTTTATTT GTTTAAAATG TTAAATATAT ATACATACAT      420
ATATATATAT TTGTCTGTAA GAATTATGTT TTAACAGCT GCTGTAGAGT ACCTTTTTTT      480
AAGTAAATCT TACAGTGGAG TATATTTTTT AAAGCACAAA ATTGGTGCCA AGACTGGGTG      540
AGAAATGTAC ATTACCCCTT TATTATTTTG CGTCGGATTC CTCGAG                      586

```

(2) INFORMATION FOR SEQ ID NO:879:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:879:

```

GAATTCGGCC AAAGAGCCGG AATTGGCCCC TCGAAGCCAA GAATTCGGCA CGAGGGGAAA      60
ATCTTGTCCT AAAAATATAT GAGTTTGGGG GTAAGGGGTG GGATAGCCAA GCAAAATCAG      120
TAATTATTTT AAAATGAACA TATGAATTTT TATTAACTTT TAGTTAAATA CAGATTTTAC      180
AACGAGGTCA GCATAAGCCT AAATCTATAT AGAGGGCTAA CTCAGGCATT GTCTTGTTTA      240
TTTGTAGACT GGATTAAAAA CAACCTGTCC TGTTTGTCA GTCCCAGCT TCTTCGTTTA      300
GAATAAATTA GACCAAAAGA AGAAACGTGC TTGTCTCTGT ATACCCGAG AATGAAGTTA      360
CTGTTGTTAA AACCGGATTT TTCATTTTA CTAGGTTCCG CTCTCTCCCT CGAG                      414

```

(2) INFORMATION FOR SEQ ID NO:880:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:880:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC TCGAAGCCAA GAATTCGGCA CGAGGGTAAT      60
TTTAAAAATT TATGTATTTT CTAGCATTTG CCTCAAGGAT TGAAATTTT TTTTACTT      120

```

```

GTGTTTACAG GTAGAATTCT TTATTTAAAA AGTCAGTTGA ATATCAAAAC TATTTGATAT      180
TCTTCAGACT GGAATATTAT TCTCTAGTGT AGAAGAAAAC ATTTTCTGCT TACAAAACAA      240
ATAGTAAATA CTCTAAAATA GGGGTTGGCA AACTTTTCTT AAATAAAAGG CCAGATGGTA      300
ACTATTTTAG GTTTTGTGGG CCATGTGTG ATAACATTTT TAGGTTTGT GGGCTACGTA      360
TGGTGTCAAT CTCCTATTCT CTCTCTATCA CCTACCCTCG AG                          402

```

(2) INFORMATION FOR SEQ ID NO:881:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:881:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGGCC      60
GTTTTTTTTT TTTTTTTTTT TTTTTCNNG NNAGGCTTTC CCTAGGTGAT TTTTAATTGC      120
TATTATAAAT AAATATCCAT TTTTCCATA AAATATTGCT ATATGTTAGT ATATTAATCT      180
TGTAAGTTA CCTTTTCAA CTCTATTGGT TCTGATAGCT TGTCAGTTGT CTACCTTTCA      240
TCTTCTAGGT AAATATTCT TACAAATAAT GAGATTGCT CCTACTTCC AATTATCTC      300
ATTACTTTTA CTNNTCTTAC TGCACTGGCT AGGACACCAC TACCTTCTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:882:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:882:

```

TTTTTTTTTT TTTTAACTT AAAAATAGTT GTATTTATAT TCCACAATTT GTTCAAATAC      60
TGGTTTCTT ATAAACTTTC TACAGGATGT TTTTAAACAA ATTCTTCACA TTGTGTTTTG      120
ACTATGTAAT TGCGGAATTT CAGGGAAATA GTTCTGTGTA TTTTAAATAG CTTAATTTGT      180
ACTAAAGGGA TGGTAGGTGG TCACATGCAG TCCATGTGGG ATTCTAACAT GACATTTAGT      240
GAGTTTCTG ATGTGGACCA TCCCTTTGAT GCTGAAGGTA ATGCATCTGT TGAAAGAAGT      300
GACTGTAGAT TTGGATTACT GCTCTCTGCA TCTCCCTCTT TTCTGCTCGA G              351

```

(2) INFORMATION FOR SEQ ID NO:883:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:883:

```

GAATTCGGCC TTCATGGCAA GAAGGAGNCT TAGCATCAAA CTTTGGAAAG GGAAGCCAGA      60
GAAAAGGTA GAATGGACAA GTGACACTGT GGACAATGAA CACATGGGCC GCCGTTTCATC      120
CAATGCTGC TGTATTTATG AGAAACTCG GGCCTTTGGC GAGAGCTCCA CGGAAAGTGA      180

```

TGAGGAGGAA	GAAGAGGGCT	GTGGCATACA	CACTGTGTAC	GTGGCCACCG	CAAAGGACGG	240
GTNTGCAAC	CCTAGGACCG	ACCCCCACCA	CCCTTCCCCA	GCTCCTGACC	NTTCCCAGCC	300
CCCTCCAGGG	CCAATGCAGC	ACTAAATCCC	TCTCTCCTCC	AGCATTCCCTG	TGTCTGTCTG	360
GCCCTAAATG	TATCCATGTG	GCTACTTCTC	CAGCCCCCTC	CTTCCCTNTC	TTCTGCCTGA	420
TAGAGGGAAG	AGGAAGAGGA	GGACGAACAG	AGATCCTGAA	ATTCTGACTT	GCTGCTATTG	480
CAGAACCCAG	CCTCCTGGGT	TTCCCCAGTC	CTCATTTTTC	CTCCCAATAC	CCACCCTTCT	540
CTCTCGAG						548

(2) INFORMATION FOR SEQ ID NO:884:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:884:

GAATTCGGCC	TTCATGGCCT	AAAAAATACA	AAAAATTAGC	CGGGCGTGTT	GGCGGGCGCC	60
TGTAGTCCCA	GCTACTTGGG	AGGCTGAGGC	AGGAGAATGG	CATGAACCTG	GGAGGCGGAG	120
CTTGCACTGA	GCCGAGATCG	CGCCACTGCA	CTCCAACCTG	GGAGACACAG	CGAGACTCCG	180
TCTCCNAAAA	AAAAAATAAC	AAAAAACAC	ACTTGTCTTA	CAAAGACTAA	CAAAAGATAC	240
AAAATAAAAT	AACCTTACAG	CATCATTAGA	AAGCGAACAA	AATCCTAAGA	TAGATACATT	300
TATCTTTCTT	GTTTTAGAAC	TTTTTCTGTG	TAATGGAATG	GAAATGCTTA	ATCTTGTTTC	360
AATGTTTTCA	GTGTTTGTGC	TTTGTCAAAT	TGAGGTTGGA	TGTTAAAGCC	CTTACTACTG	420
TATTATACAA	AGCAGCGAAC	CTCGAG				446

(2) INFORMATION FOR SEQ ID NO:885:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:885:

GAATTCGGCC	TTCATGGCCT	AGCCGGCGCC	GCCGNGTCTT	CCCGGTCTCC	TTTCCCGGCC	60
GCACAGGGTT	TTATAGGATC	ACATTGACAA	AAGTACCATG	GAGTTTATG	AGTCAGCATA	120
TTTTATTGTT	CTTATTCCTT	CAATAGTTAT	TACAGTAATT	TTCTCTTCT	TCTGGCTTTT	180
CATGAAAGAA	ACATTATATG	ATGAAGTTCT	TGCAAAACAG	AAAAGAGAAC	AAAAGCTTAT	240
TCCTACCAAA	ACAGATAAAA	AGAAAGCAGA	AAAGAAAAAG	AATAAAAAGA	AAGAAATCCA	300
GAATGGAAAC	CTCCATGAAT	CCGACTCTGA	GAGTGACCT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:886:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:886:


```

GAATTCGGCC TTCATGGCCT AAAAATCTAA ATTAAGTAT GAATAATTTA AAACAGAATT      60
TCAACATTGA GACAATGTAG AGATATATTA TGGTATAAAA TGAAGCATTT GCACGAACCT      120
TTTAGCTAAA ATTTGTTTCA AAGAAGTTGC TTTTGTTTTT AGTGTACCTT GAGTTCAACA      180
CAGATGTGAA TGCCCGCTTT TTCCAGAAGG GTTCTTGGGA GAAAACACTG GAGAAGTTCT      240
AAGCACTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTAGA GATGGTTTCT TACTCTGTTG      300
TTCAGGCTGG AGTGCACTGT TGCAATCATA GCTCACTGCA GCCTTGACCT CCTGGCCTCA      360
AGTGATACCC CTGTCTCAGC CTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:887:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 364 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:887:

```

GCCCCAGTCT AAGGCATTTA AAATTAAACA GCTCTTCAAC GCCCCAAGTT ATTTTCATCAG      60
GCTAAGAACT TCTCCGAGAA ACGCACAAGA AGGCAGGCAA ACAGGTGGGT AGGTGAGAGG      120
TCACGGGGCT CCATCTGCAA GCTCCATCTA CAAGGCATCA ATCTGCGTTG TGGCATCAAC      180
GTTAAAATGT TCTACAGCTT AGGGATCTTC TTGAAGCAAG GTTCCAAGCA CAAAACTAGT      240
ATGACCGGAG GCTCAATTGA GAAGATGCAG CATCTGAAAA CCTTTACCCC AGGAAAGGAG      300
GGGTGCCTGC TGGCATTTCAT GGGCTCTGGA ACAAGCATTT ATTCAAAGCT GATGGCCCCT      360
CGAG

```

(2) INFORMATION FOR SEQ ID NO:888:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 416 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:888:

```

GCACCCCCAA ATGCCAGCCT CTCCTTTCTT CCCATCCACC AGTATACTGC GGGGCCATTT      60
CTGGTCTTTG TCCAACAGGA AACCCATTTC TGGTGGGATA TGCCTTCCAG TGCCACAGGG      120
CCACTCACCC CATGCATCTC TGTCTGCCCC GTCAGTGCTG GGACGGACAG CAAGGGCAAG      180
CCCAGTGTCT GGC GGATAGG TGGGTGGGAA CAGAGAGGGG AGAATGCCGT CCTAAGCTTC      240
TGCTTGGGGA TCCCCACAC GACCTGGGTA CTGCCTGGGA AACCTGTCCT AAGTAAAACT      300
ATGGACCTCG CCTCGCCAC CGGCCTGCGA AGCCAGCATC TCCGTGAAGG TGGATGGAAG      360
CGCCTTTGTC CTCATTTTGA GTCGAAGCT GGGTCAGCGG CTCTGAAGCC CTCGAG      416

```

(2) INFORMATION FOR SEQ ID NO:889:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 349 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:889:

GTAGGCCATG	AAGGCCGAAT	GGAAAAAGTC	AGTTAAAGAG	GACTCAGTCC	CCACAGGTGC	60
GGAGGAGAAT	GTGGTGTGTG	AGTCACCACT	AGAGATTATA	AAGTCCAAGG	AAGTAGAATC	120
AGCCTTACAA	ACAGTGGACC	TCAACGAAGG	AGATGCTGCA	CCTGAACCCA	CAGAAGCGAA	180
ACTCAAAGA	GAAGAAAGCA	AACCAAGAAC	CTCTCTGATG	GCGTTTCTCA	GACAAATGAC	240
ATCAGACTCC	ACAGAAAAGA	CTATCACACC	GCCAGAGCCT	GAACCAACAG	GAGCACCACA	300
GAAGGGTAAA	GAGGGCTCCT	CGAAGGACAA	GAAGTCAGCA	GCTCTCGAG		349

(2) INFORMATION FOR SEQ ID NO:890:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 719 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:890:

GAATTCGGCC	TTCATGGCCT	AGACCTGCCT	CGAGGATGCT	CTGGGTTTGC	TGTAGTCGTC	60
TGTTACTGGT	CNTGTTAGGA	GGAGGGCCAG	GGGGACCCC	ACCTGGGGCA	GTCCCTTCTG	120
TCCCTTCAGC	AGGTGGCTGA	GCTGGAGCAG	ACATTTTTCT	GACAGAGAGA	GTGAGGGTCT	180
GTTCTCTCC	GGAGGCTGCG	GCGAGACACC	CGGCGAGGGA	CGCTGCGGCT	GAAGTGGACG	240
GAAC TGCCAA	GCTCCGCCTC	GCGCCGACTA	CCCCGCGGTC	TAGCTGCGCT	GGGGTTTCAC	300
CATGTTGGCC	AGGATGGTCT	CGATCTCTTG	ACCTTGATGAT	CTGCCTGCCT	CGGCCTCCCA	360
AAGTGCTGGA	ATTACAGGTA	TGAGCCACTG	TGCCTGACAC	CTGTCAAATT	ATTTTACTGT	420
GTTTATTAC	CATGTTTCTT	TCACTGTGGG	GTCTCTGTCC	TTGCTGTTTT	GTTTTTCTTT	480
TAAC TTCTTT	TGTTATTTAG	GAAGGTTTAT	ATTAATATTT	TAATTCTACA	TTGGATAATT	540
CCTATATCAA	AACTATTGTT	GACAATCAGT	TACAGATGGA	ACTTCGTCTA	CTCTTTCTCC	600
CCTTCTCACT	CCTGCTCTTT	CTCCCTTTCT	CAC TCCAGCA	GTTGACTAGT	CTCATTGAAA	660
AAACAAATTG	GGGCCGGCCA	GGCATGATGG	CTCATGCCTG	TAATCCCAGA	CAACTCGAG	719

(2) INFORMATION FOR SEQ ID NO:891:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 453 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:891:

GAATTCGGCC	TTCATGGCCT	AGATACTCCG	CTGAAGATCT	GATGTCACCC	CAAATGCATG	60
GCTCCAGCCT	CAGTTCAGCT	TTCCCACTG	CTTGCAAGAA	TTCTTTCATT	TATCTTGAGT	120
TTCTCTCTC	ACTCCCATGG	TAGCTTTTCC	ATTCCCACTG	CCTCTTCTCA	CATTTTCAGTA	180
GATGAGAATA	GAAGCCATAG	GAAGCAAAC	TCCTCAACCT	CCAGCCAACC	GCCGAGCGAT	240
GGGCATCTCT	CGGGACAAC	GGCACAAGCG	CCGCAAAACC	GGGGGCAAGA	GAAAGCCCTA	300
CCACAAGAAG	CGGAAGTATG	AGTTGGGGCG	CCCAGCTGCC	AACACCAAGA	TTGGCCCCCG	360
CCGCATCCAC	ACAGTCCGTG	TGCGGGGAGG	TAACAAGAAA	TACCGTGCCC	TGAGGTTGGA	420
CGTGGGGAAT	TTCTCCTGGG	GCTCAGACTC	GAG			453

(2) INFORMATION FOR SEQ ID NO:892:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 350 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:892:

GAATTCGGCC	TTCATGGCCT	ACCAGCCTCT	GGGCTGAGGC	AAAGACCTCT	GAGGCCCCCGT	60
CCACCCAGGA	CCCCTCCACC	CAGGCCTCCA	CTGCGTCCTC	CCCAGCCCCA	GAGGAGAATG	120
CTCCGTCTGA	AGGCCAGCGT	GTGTGGGGTC	AGGGACAGAG	CCCCAGGCCA	GAGAACTCTC	180
TGGAGCGGGA	GGAGATGGGT	CCCGTGCCAG	CGCACACGGA	TGCCTTCCAG	GA CTGGGGGC	240
CTGGCAGCAT	GGCCACGTC	TCTGTGTCC	CTGTCTCCTC	AGAAGGGACC	CCCAGCAGGG	300
AGCCAGTGGC	TTCAGGCAGC	TGGACCCCTA	AGGCTGAGGA	ACCCCTCGAG		350

(2) INFORMATION FOR SEQ ID NO:893:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:893:

AACAGGAGAT	GGACAAGCTG	AAGGAGCAAT	ATGATGCTGA	GTTGCAGGCC	CTGAGGGAGA	60
GTGTGGAAGA	AGCAACCAAG	AATGTCGAGG	TCTTGGCGAG	CAGGAGCAAC	ACTTCAGAGC	120
AAGACCAAGC	GGGGACTGAA	ATGCGCGTGA	AGCTTCTGCA	GGAGGAGAAT	GAGAAGCTGC	180
AGGGAAGAAG	CGAAGAGCTG	GAGCGGAGAG	TTGCTCAGCT	TCAAAGGCAG	ATCGAGGACC	240
TGAAAGGCGA	TGAAGCCAAG	GCGAAGGAAA	CGCTGAAGAA	GTACGAGGGA	GAAATACGAC	300
AGTTAGAGGA	GGCCCTTG TG	CACGCCAGAA	AGGAAGAAAA	AGAAGCTGTG	TCAGCCAGAA	360
GGGCCCTGGA	GAATGAACTG	GAGGCTGCTC	AGGGAAATCT	GAGTCAGACT	ACCCAGGAGC	420
AGAAGCAATT	GTCTGAGAAG	CTCAAAGAGG	AGAGTGAGGC	GCTCGAG		467

(2) INFORMATION FOR SEQ ID NO:894:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:894:

GAATTCGGGC	TTCATGGCCT	ACTCAGCTTT	CCTGGTCTCC	CATCTGAACT	GCTTCTTTGT	60
GCACCTCTTG	TTCTTTCTCT	TGGCTCCCAG	TCTTGATTCC	TGTGATCACT	CTTGCAATCAC	120
TAATTGCACA	AGTGATTTC	GGTGCAATTC	TGATTAGCCT	GCGTCCACAC	AGTGATCGAT	180
GATCCTATGT	GCCTAGAAAG	GACACTGTGT	GCTGCTCATG	ACCTGCAACA	GGAAAAAAGC	240
CATTTCTTGT	TAGCAGTGTA	AGAACCCTAG	AGCAAAGGAG	TTGACCTTCT	GATTGAATAT	300
AAGCACAACC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:895:

```
GGGCTTAGTT AGGAGCTATG GCTAAACATC ATCCTGATTT GATCTTTTGC CGCAAGCAGG      60
CTGGTGTGTC CATCGGAAGA CTGTGTGAAA AATGTGATGG CAAGTGTGTG ATTTGTGACT      120
CCTATGTGCG TCCCTGCACT CTGGTGCACA TATGTGATGA GTGTAACATG GGATCTTACC      180
AGGGGCGCTG TGTGATCTGT GGAGGACCTG GGGTCTCTGA TGCCTATTAT TGTAAGGAGT      240
GCACCATCCA GGAGAAGGAC AGAGATGGCT GCCCAAAGAT TGTCAATCTG GAGGAACTCG      300
AG                                                                                   302
```

(2) INFORMATION FOR SEQ ID NO:896:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:896:

```
GAATTCGGCC TTCATGGNCT ANTCTCATT NAAATATATC CTTACTGAAA CATCTGGAAT      60
AACGTCTGAC CAAATATCTG GGTACAGTGA TCCAGCCAAG TTGAGACATG AAATTAATCA      120
CCATGGCCTA CATTTTTATC TGTTGGCTG CAATTCTGTC AAAGGCTTCT GCTCTTCATA      180
ACATTTCACT CACTAGCTCC ATGAAGCCAT ATGATACAAA CCTTGCCTGT GTAGCCTTCA      240
CTTTTTTCCA AAAGAAGTCT ATTAAATGCC AATCAAGTAT CTTCTCCTCC AAGCTCAGTA      300
GCTCGGGCCT TCAACAGCTG TTCCCATTC CGATCCATCT CCCTGAGCTA CCCTGGCATT      360
CTTATCAGGA CACTGGAGGA ATCTATGTAT GTGCCTCTAA AGATTGAGCA CCCAACATG      420
ATAGAAATCA CTGTGTTTAC ACTGTATCTC TATATCTGCC CATCCGCTC GAG                   473
```

(2) INFORMATION FOR SEQ ID NO:897:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 594 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:897:

```
GCTCGAGTGA AGTGGTATCT CATTGTGTTT TGGGTTTTAA TTTTATAATA TTTTAATTTT      60
TAAAATCAAA AGAATATACT GGGGCTGGGG TGGTGGCTCA AGCCTGTAAT CCCAGCACCC      120
TGGGGGGCCA AAGGGGGTGG ACCACCTGAG TTTATGAGTT CAAGACCAGC CTGGCCAACA      180
CGGTGAAACC CCATCTCCAC TAAACATACA AAACCTAGCC GGGTATGGTG GCAGGCACCC      240
GTAATCCCAG CCTCTCAGGA GGCTGAAACA GGAGAATCAC CTGATCCGGG AGGTGGAGGC      300
TGCCATGAGT CAGAATCACG TCACTGCACT CCAGCCTGAG AGGAGACCCG TACAAAAAAA      360
AAAAAAAATA ATATATATAT ATACACACAC ACACACACAC ACAAGGATT TTAGATTGAA      420
AATGATGTTT TTTACTCATT TCAAAATGTA CTGTAACCTT TCTTTGGTTC TTACTGTTTT      480
CATTTAACTT TCTCTGTTTT CAAGAAAAAT TGTCTTTATT GACATTTGTA AAAAAGAATG      540
TGTTTTGCCC AGTTATTAAG TATTTTATTT TTATGCAATT TCAGAACACT CGAG                   594
```

(2) INFORMATION FOR SEQ ID NO:898:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:898:

GAATTCGGCC	TTCATGGCCT	ACTGTACATT	TTTTTTAAAG	TTTGTTGAAA	AGAATATTGT	60
CTTATTCTAT	AAAACATTTC	AAACCTAGTT	AGAGATTGT	AATCAAAAAA	CATTTCGCGA	120
GAAAGCAGCA	CTTAGGGCTG	CCTGTTCTAT	ACCCTACAGT	CAGACAGGAA	AAGAACTGAA	180
AATGGCACCC	TTCTGACATT	CTGAGGCAGC	TGGACTGGCA	GCCAAGTAAA	GGAGAGTGAT	240
GAGGTGGTGT	GGGGAGGGTG	GGGAGGCAGC	GCGAGGGTGC	TCTCCACAGG	GTAGGTCTCG	300
AG						302

(2) INFORMATION FOR SEQ ID NO:899:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 475 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:899:

GCGGCCTTCA	TGGCCTAGTG	CTTGTCAGTT	TGGAAAGTCA	CAGGGAGTTT	ACCATTCTAT	60
AATTAGAGTA	GGAGGAAAAT	GAGAACCCAC	TGGTAGAAGA	AGAAGCAACA	GTCTTCTAGG	120
GTCTGGCATT	TGATGAGATA	GGTATTCAGT	TACTGTGCAT	TTCCATTGTT	TTTCCATGGC	180
AGAACATACG	GCAGAGATTT	GGGAACTCGC	ATGCCTGAAG	CCAGGTTATT	CTTATGTTCT	240
GTAACATATG	TGCTCGCAGG	GCTGTTGTTG	TCAGAGTAGT	GAGTTGTGCC	CCAGACAAAT	300
GGGGTGCTGG	TCTGCTCCCA	CAAATCTTTA	TCCCAGTCTT	CATCGCAAGG	AGGGCACTGC	360
CAAGTGCTCT	CAGCCAGAGT	CTCTTGTCTA	AGGCTCCTGG	TTTGGTTGAC	AACATCTTGC	420
TCAATACAAC	TTCTGTCATC	ACAGCTTGAG	ATATGATGAC	TAATTCAGC	TCGAG	475

(2) INFORMATION FOR SEQ ID NO:900:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 507 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:900:

GAATTCGGCC	TTCATGGCCT	ACAGCTGCCT	TTTTCTTTAA	AGGGGTTCTT	GTCTTCTGGA	60
ATTCCCTTTA	CTAGAGGATC	CTCTCCAGAA	CGTTCTTCAA	TATAGTTCTT	TATTCTTTCA	120
GAACATTTAG	ACACTTGTG	TCTCTGCAAC	TTCACTTCTT	TGCGAAGCTG	CTCAACTTCC	180
ATTTTCAGTT	TTTCCTTCTC	TGGCAAATCT	TCGATGTGAA	GGGCAGGCAT	TTTCGCCCCA	240
GAACCGGGCT	CAGGCTAGCT	CTGGCAGCGG	AGCCGCTGGA	AGAGCGGCGA	AGCTCGGCGC	300
GTCCCGAAAC	AACTGAAGGC	CTGGCCCGCC	GCCCACCCGC	GCAGGATGTG	ACTGCAGCCC	360
TGCTGCGGTC	CCCAGCTCCC	CGAGGCTTGG	GCTTTCTCCG	GGACGCTTGT	CACGCCAGCG	420
TGCCCCAGCT	TCCTAGGACC	TGAGAACTCT	GCCTTTTCTC	AAGTCCCTGC	AACCCAGGAG	480
GCCTGCCCGG	GTGCTAGTAG	GCCATGA				507

(2) INFORMATION FOR SEQ ID NO:901:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 495 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:901:

```
GAATTCGGCC TTCATGGCCT AGTTTGGATT TTCATATTAG GGATACTCAA CTGGTATTAT      60
TATTCGCGCC CCTGCAAATT TTTCAGTAGG TCCCCTAGTA TGTCATGCCA GGGACTATGN      120
GAGTTCCTGG GAATAGCACT GTAANACATT CTTGAGTGGG TCCTTGACTC CATTGAGTTT      180
ATAATCTCGT AGGAGGAAGG CTATGAAGAA TTCTAATAAA GCAAAGCAAG CAATCACAAC      240
AAACCTTCCT CTTTAACTTA TCAAAAATGG AAACCTTGAA GAGCTGCTCT TTAATAAATC      300
ATTGGAAAGC ACCAGGACCC AGGTGTTTGG ACTCAGCCTC ATTCAGACT GAGATCTGAG      360
GCCATGATAA CTCATGTGCC TATATATGCT GATAATCACC ATTACCTATA CCATTCTTTA      420
CATTCTCTCA TCTACACAAT CATCTTCAAC TCTCTCTCAT CCACTTCAGC GATTGAATTC      480
TTTACCGGCC TCGAG                                     495
```

(2) INFORMATION FOR SEQ ID NO:902:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 266 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:902:

```
GAATTCGGCC AAAGAGGCCT AGAATTCCAG ACCTAGCTCA ACCCATGCCT CCTTTCCTTC      60
CTTCCCTCCT TCCTTCTTTT CTTTTCCTT TTCTCCTTCC CTCCTTCTC CCTTTCCTTC      120
TTCTCCTCCT CTTTCTCTTT CTCCTTCTT CTTGCTCTTC CTTCTTCTC CCCTCCCTCC      180
CCTCCCTTCT TTCCTTTCCT CCCTCCCTTC CATCTTTTCC TCCCCCAGCC CCCGTTTCTT      240
CTCTTTGGAG AGATGTACAG CTCGAG                                     266
```

(2) INFORMATION FOR SEQ ID NO:903:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 410 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:903:

```
GAATTCGGCC AAAGAGGCCT AAATGAGAGC TGAGTGAAGT GGATGCCCCT TATAAAAACA      60
TCAGATCTCG TGAGAACTTA CTATCACTAG AATAGCATGG GGAACCACC CCATGATTCA      120
GTTACCTGCC CCCAGGTCTC TGCCACCACA CATGGGGATT ATGGGAACTA CAACTCAAGA      180
TGAGATTGG GTGGGGACAC AGGCAAATTA TATCAGCTGT TGTGCTCATT AGTTTGTATA      240
TCATCCTTGG CTCCTTTAGC ACTATAAGGG CAGGATTGAG TCCTTGCAAC AGAAACCATT      300
CAGCCTGCAA AGCTGAACCT ATTTACTTTC TGACCCCTTA TGGAAAAGTT TACTGATCTC      360
TGGACTAGAC AGTTTTTTAA AAATGACATC TTATGACCGG GATTCTCGAG      410
```

(2) INFORMATION FOR SEQ ID NO:904:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 326 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:904:

```
GAATTCGGCC AAAGAGGCCT AGCCGAGACT CTGTCTCAAA AAAAAGAAAA AAAGCTGCTT    60
TGGGTCTTAT GAGGGAGGGG ACTGGGAATC TAGGTGTTTC AAGCGCCCCA GGCGATTCTT    120
AAGGTCACAC AAGCTTGGGA GACACTTCAT TAAGCAAAAT CTTTGGCCG TTTTGTCTTG    180
GTTGAGCCTC AGTGTCTATT CATTGAGTGG TCACCAAGAG TTTGGGGTGG ACTGATCATC    240
AGCATTTACA GGTTTGGAAG TTGAATTTAG TTTTACTACT CAGAGCTTAT TAGACTTGAG    300
CAGATTTAAA CGGAAGGACA CTCGAG                                     326
```

(2) INFORMATION FOR SEQ ID NO:905:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 410 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:905:

```
GAATTCGGCC AAAGAGGCCT AGGAAGTGT TTGACCCTGA AGGCTATTTA ATCCACTGTC    60
CCCTACAAGG CCTACAAGT GCTGGGGGAA AAAAAACAGC AATGAGGATG ATCCTGAGTT    120
AATGTGTATG CTCCGCAAGA GAGCTTGCCT ATACCTTGAT TATTCATAA AATCACATGT    180
TAATACATTG CTTTCAGAAT GAAATACTGA CTTGATCTGA TAGGAGAAAA TGGAATATT    240
TCATAGTTGT TTTCCAAAGA CAAATTTAAA TGTTGTCTGT TATCTCCTTA CTTAGTTTAA    300
GAATTTAGTT TTGAACCCCA TTGACTTTGT CATTTGCAAT TTTAAAAATA TTTGGGACTG    360
GGCATGGTCG CTCACGCTG TAATCCCAGC ACTTGGGAG GCATCTCGAG                                     410
```

(2) INFORMATION FOR SEQ ID NO:906:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 498 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:906:

```
GAATTCGGCC AAAGAGGCCT ACGCTTCCCG GGTTCAGCG ATTCTCCTGC CTCAGCCTTT    60
TGAGTGGCTG GGAATACAGG TGGATGCCTC CATGCCTGGC TAATTTTTTG TATTTTAGTG    120
GAGACAGGGT TTCACCGTGT TGCCCGGGCT GGTCTGAAC TCGTGAGCTC GGGCAATCCA    180
CACTCCTTGG CCTCCCAAAG TGCTAGGATT ACAGGTGTGA GCCACTGCAC CCGGTCGAGG    240
TACAGTTTGG AAGTTCATGC AAATCTCATC ATTTGCTCTT CTGCAACAAA ACATTTTCTT    300
TCAACTTATT TTGCCTGTGT GAAGCTCAGT GCTTTAACTC ATATATGGAG TTATCTTCTT    360
CCCTCAGACT GGAGACGTTG GTGAAATTGG GGCTAGACTG AAGATGTCTA AGGTGGCTTG    420
ATTGACAAAG GTCTCTCTC ATCCCCAAA TAAATAACAT TTTTTCATT ATAATAGTAA    480
TACACCACTG GACTCGAG                                     498
```

(2) INFORMATION FOR SEQ ID NO:907:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:907:

```

GAATTCGGCC AAAGAGGCCT AACTGGTGC TGGTTTCACA TCACGACAGC AACGGGATTC      60
TTTTGCTTTG AAAATGTTGC AGTCCACCTG TCCAACCTGA TCTCCGGAC ATTTGACTTG      120
TTTCTGGTTA TCCACCATCT CTTTGCCTTT CTTGGGTTTC TTGGCTGCTT GGTCATCTC      180
CAAGCTGGCC ACTATCTAGC TATGACCACG TTGCTCCTGG AGATGAGCAC GCCCTTTACC      240
TGCGTTTCCT GGATGCTCTT AAAGGCGGGC TGGTCCGAGT CTCTGTTTTG GAAGCTCAAC      300
CAGTGGCTGA TGATTCACAT GTTTCACATGC CGCATGGTTC TAACCTACCA CATGTGGTGG      360
GTGTGTTTCT GGCACCTGGG CGGCCTGGTC AGCAGCCTGT ATCTGCCTCA TTTGACACTG      420
TTCCTTGTCG GACTGGCTCT GCTTACGCTA ATCATTAAAT CATATTGGAC CCAGACTCGA      480
G

```

(2) INFORMATION FOR SEQ ID NO:908:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 764 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:908:

```

GAATTCGGCC AAAGAGGCCT AGAAACAATG GTTTTCAGAC ACTGAAAGTT CATAGTACAG      60
GACTGTGATC TCTGCGAGAA GGGGGAATAA TGAGGTGAGT CCAGTGATTG CTCAGGCGAA      120
TGGCCTGGAG GCAGTTTCTA GGCAGCAAAG CAGGGAGAGG GAAGCCAGAG ACCAGTGGTC      180
CTGCTGTGTT GAGGAGATGG AGATCAGTGT CACCGGAGGC CAAGGTGAGT AAGTGAGAGG      240
AGAGGAGGCA GCAGCACACA GACAGAGAGT GCTGTAGATC TGCAGTGGGT CCCCTGGAGT      300
CCTTGGTTGA GTGAAGGTGT TAGAAGAAAC TACTTAAGCC AAGAAATGAG TAACTGGAAA      360
TTAGTAGAGC AAATAATTTA CAGATCATCT ATGGGGCTGG GAAAAGTTTG TGTTCCTACT      420
AGCCAGAGTA GAAATAAATC ATAATGCATG GGTTCATCAGG TGGAGTCCTC CAACAGGTGT      480
TGCCTTAGTA CTGAGGTCAA ATTGTCCCTA GACCAAAGGC TTCTTTGGAC TTCCCCTAAC      540
AAAGCTTAAA GACAAGCCTT GGAAGGATCA AACTAATTTT AAGAACTTA ACTGTGAATC      600
AGAATAAAAC CCAATACCAT TTATAGGAAT ATAACAAAAT CCATCAACAN ACNACATAAC      660
ACTCATAATT ACCAACATTC AGTAAAAAAT TACTGGAAAC AGAGAAATAT AAATTATGGC      720
CCATAATTAG GAAAAAAGGG TAATCATTAG AGGTAGAACT CGAG

```

(2) INFORMATION FOR SEQ ID NO:909:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:909:


```

GAATTCGGCC AAAGAGGCCT ACTAAGGACT TGTTCGGAA GGAGCTGACT GGCCAATCAC      60
AATTGCGAAG ATGAAGGCTC TGTGGGCCGT GCTGTTGGTC ACATTGCTGA CAGGATGCCT      120
AGCCGAGGGA GAGCCGAGG TGACAGATCA GCTCGAG                                157

```

(2) INFORMATION FOR SEQ ID NO:910:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 487 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:910:

```

GAATTCGCGG CCGCGTCGAC AGAATAGACC TGGTTTGTGA ATTATGGCCT GGATTTCACT      60
TATACTCTCT CTCCTGGCTC TCAGCTCAGG GGCCATTTCC CAGGCTGTG TGACTCAGGA      120
ATCTGCACTC ACCACATCAC CTGGTGAAAC AGTCACACTC ACTTGTCGCT CAAGTACTGG      180
GGCTGTTACA ACTAGTAACT ATGCCAACTG GGTCCAAGAA AAACCAGATC ATTTATTAC      240
TGGTCTAATA GGTGGTACCA ACAACCGAGC TCCAGGTGTT CCTGCCAGAT TCTCAGGCTC      300
CCTGATTGGA GACAAGGCTG CCCTCACCAT CACAGGGGCA CAGACTGAGG ATGAGGCAAT      360
ATATTTCTGT GCTCTATGGT ACAGCAACCA TTGGGTGTTT GGTGGAGGAA CCAAACGAC      420
TGTCCTAGGC CAGCCCAAGT CTTGCCATC AGTCACCCTG TTTCCACCTT CCTCTGAAGA      480
GCTCGAG                                487

```

(2) INFORMATION FOR SEQ ID NO:911:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 478 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:911:

```

GAATTCGCGG CCGCGTCGAC AGTTACTGAG CACACAGGAC CTCACAATGG GATGGAGCTA      60
TATCATCCTC TTTTGGTAG CAACAGCTAC AGGTGTCCAC TCCAGGTCC AACTGCAGCA      120
GCCTGGGGCT GAGCTGGTAA AGCCTGGGGC TTCAGTGAAG TTGTCCTGCA AGGCTTCTGG      180
CTACACTTTC ACCAGCTACT GGATGCACTG GGTGAAGCAG AGGCCTGGAC AAGGCCTTGA      240
GTGGATTGGA ATGATTCATC CTAATAGTGG TAGTACTAAC TACAATGAGA AGTTCAAGAG      300
CAAGGCCACA CTGACTGTAG ACAAATCCTC CAGCACAGCC TACATGCAAC TCAGCAGCCT      360
GACATCTGAG GACTCTGCGG TCTATTACTG TGCAAGGGAC AGCTCAGGCT ACGACTATGC      420
TATGGACTAC TGGGGTCAAG GAACCTCAGT CACCGTCTCC TCAGCCAAAA CGCTCGAG      478

```

(2) INFORMATION FOR SEQ ID NO:912:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 433 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:912:

```

GAATTCGCGG CCGCGTCGAC CCAGGATGCC GCGCAGCAGA GCTCTGATTC TGGGGGTCCT      60
CGCCCTGACC ACCATGCTCA GCCTCTGTGG AGGTGAAGAC GACATTGAGG CCGACCACGT      120
AGGCACCTAT GGTATAAGTG TATATCAGTC TCCTGGAGAC ATTGGCCAGT ACACATTGTA      180
ATTTGATGGT GATGAGTTGT TCTATGTGGA CTGGGATAAG AAGGAGACTG TCTGGATGCT      240
TCCTGAGTTT GGCCAATTGG CAAGCTTTGA CCCCCAAGGT GGAAGTCAAA ACATAGCTGT      300
AGTAAACAC AACTTGGGAG TCTTGACTAA GAGGTCAAAT TCCACCCAG CTACCAATGA      360
GGCTCCTCAA GCGACTGTGT TCCCAAGTC CCCTGTGCTG CTGGGTCAGC CCAACACCCT      420
CATCATGCTC GAG                                         433

```

(2) INFORMATION FOR SEQ ID NO:913:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 139 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:913:

```

GAATTCGCGG CCGCGTCGAC GCAAGATGGA TTCACAGGCC CAGGTTCTTA TATTGCTGCT      60
GCTATGGGTA TCTGGTACCT GTGGGGACAT TGTGATGTCA CAGTCTCCAT CCTCCCTGGC      120
TGTGTCAGCA GGAGAGAAG                                         139

```

(2) INFORMATION FOR SEQ ID NO:914:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 166 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:914:

```

GAATTCGCGG CCGCGTCGAC ATCATGGCTA CCCTGCGTGT CCCACTCCTG GTGGCTCTCG      60
TCCTTCTTGC TGTGGCAATT CAGACCTCTG ATGCAGGTCC CTATGGTGCC AATGTGGAAG      120
ACAGTATCTG CTGCCAGGAC TACATCCGTC ACCCTCTGCC ATCACG                                         166

```

(2) INFORMATION FOR SEQ ID NO:915:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 590 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:915:

```

GAATTCGCGG CCGCGTCGAC TTCTTGGGCA GCACAGAAGA CAGAGCCGAT TTTGACCAAG      60
CTATGTTCCC TGTGATGGAG ACCTTCGAAA TCAATGATCC AGTGCCCAAG AAGAGAAATG      120
GGGGGACCTT CTGCATGGCA GTCATGGCCA TCCACCTGAT CCTGCTCAGC GCAGGTACTG      180
CACTGCTGCT GATTCAAGTT CTCAATCTGC AGGAGCAGCT CCAGATGCTA GAGATGTGCT      240
GTGGCAATGG ATCACTAGCT ATCGAGGACA AGCCCTTCTT CTCGCTGCAG TGGGCACCCA      300
AAACACACCT GGTACCTAGA GCACAGGGGC TGCAAGCCTT GCAGGCCAG CTCAGCTGGG      360

```

TCCATACCAG	CCAGGAGCAA	CTCCGTCAGC	AGTTCAACAA	CCTCACTCAA	AATCCAGAGT	420
TGTTCCAGAT	TAAAGGTGAA	CGAGGCTCTC	CAGGTCCAAA	AGGGGCCCCG	GGTGCTCCTG	480
GAATCCCCGG	GCTGCCTGGG	CCAGCTGCTG	AGAAGGGAGA	AAAGGGGGCT	GCAGGTCGTG	540
ATGGAACCCC	AGGTGTCCAA	GGACCCAGG	GCCCACCAGG	AAAACGAG		590

(2) INFORMATION FOR SEQ ID NO:916:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 592 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:916:

GAATTCGCGG	CCGCGTCGAC	GGAAGAGCAA	TGAAAACATA	TGCTCCTACA	TTATTCATGT	60
TTCTATGGCT	GCAGCTGGAT	GGGATGAGCC	AAGGTGAGCA	GGTGGAGCAG	CTTCCTTCCA	120
TCCTGAGAGT	CCAGGAGGGA	TCCNGTGCCA	GCATCAACTG	CACTTATGAG	AACAGTGCCT	180
CCAACACTTT	CCCTTGATAT	AAGCAAGAAC	CTGGAGAGAA	TCCTAAGCTC	ATCATTGACA	240
TTCGTTCAAA	TATGGAAAGA	AAGCAGACCC	AAGGACTCAT	CGTTTTACTG	GATAAGAAAG	300
CCAAACGTTT	TCCCTGCACA	TCACAGACAC	CCAGCCTGGA	GACTCAGCCA	TGTAATTCTG	360
TGCTGCAAGT	GAGAGCACCA	ATACAGGCAA	ATTAACCTTT	GGGGATGGGA	CCGTGCTCAC	420
AGTGAAGCCA	AACATCCAGA	ACCCAGAACC	TGCTGTGTAC	CAGTTAAAAG	ATCCTCGGTC	480
TCAGGACAGC	ACCCTCTGCC	TGTTCAACGA	CTTTGACTCC	CAAATCAATG	TGCCGAAAAC	540
CATGGAATCT	GGAACGTTCA	TCACTGACAA	AACGTGTGCTG	GACAATCTCG	AG	592

(2) INFORMATION FOR SEQ ID NO:917:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 166 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:917:

GAATTCGCGG	CCGCGTCGAC	GAATGAGGTG	CTCTCTTCAG	TTCCTGGGGG	TGCTTATGTT	60
CTGGATCTCT	GGAGTCAGTG	GGGATATTGT	GATAACCCAG	GATGAACCTT	CCAATCCTGT	120
CACTTCTGGA	GAATCAGTTT	CCATCTCCTG	CAGGTCTAGT	AAGAGC		166

(2) INFORMATION FOR SEQ ID NO:918:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 200 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:918:

GAATTCGCGG	CCGCGTCGAC	GTCTGAGAGG	AACCCCTTCTC	TGAGGATGGA	CACTTCTCAC	60
ACTACAAAGT	CCTGTTTGCT	GATTCTTCTT	GTGGCCCTAC	TGTGTGCAGA	AAGAGCTCAG	120
GGACTGGAGT	GTTACCAAGT	CTATGGAGTC	CCATTTGAGA	CTTCTTGCCC	ATCAATTACC	180

TGCCCCCTACC CTATAGTGAG

200

(2) INFORMATION FOR SEQ ID NO:919:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:919:

GAATTGCGCG CCGCGTCGAC CCAACCTTCC GGAAGCCTCC CCATCAGCAC CATGAACCCA	60
AGTGCTGCCG TCATTTTCTG CCTATCCTG CTGGGTCTGA GTGGGACTCA AGGGATCCCT	120
CTCGCAAGGA CGGTCCGCTG CAACTGCATC CATATCGATG ACGGGCCAGT GAGAATGAGG	180
GCCATAGGGA AGCTTGAAAT CATCCCTGCG AGCCTATCCT GCCCACGTGT T	231

(2) INFORMATION FOR SEQ ID NO:920:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:920:

GAATTGCGCG CCGCGTCGAC GTTTTGTAT TGTTACGAAG TAAATGATTC GTATGCTGTA	60
CATAGCTGTT ATAGAAGTGG CGATTAGTGT AATTAGTAGG GCTCAGGCTC TCGAG	115

(2) INFORMATION FOR SEQ ID NO:921:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:921:

GTTGAATTCT AGAAATCAAA ATTAATTTGA CAAAGGAAAA GCAGATGCCG GAAACTTCTT	60
CCCAGTCTGT CATACAATTC ACCACTGGCC AGGTGCTGAG AGAAGCATTA GGGAACAGTG	120
TGGGTGTGT CAGAGTTGGA CGGCTCCATC CCTTTGGCTT CATTATCTTC CTCCTCATGG	180
AGATTCTAAA GCAACCCGTC GACGCGGCCG CGA	213

(2) INFORMATION FOR SEQ ID NO:922:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:922:

GAATTCGGCC AAGAGGCCTA CTTAGAAGCC AAAGAAGGAG ATTTGCACAG GATAGAAATC	60
CCATTCAAAT TCCACATGCT GCATTCAGGG CTGGTCCACG GCCTGGCTTT CTGGTTTGAC	120
GTTGCTTTCA TCGGCTCCAT AATGACCGTG TGGCTGTCCA CAGCCCCGAC AGAGCCCCTG	180
ACCCACTGGT ACCAGGTGCG GTGCCTGTTC CAGTCACCAC TGTTCGCCAA GGCAGGGGAC	240
ACGCTCTCAG GGACATGTCT GCTTATTGCC AACAAAAGAC AGAGCTACGA CATCAGTATT	300
GTGGCCCAAG TGGACCAGAC CGGCTCCAAG TCCAGTAACC TCCTGGATCT GAAAAACCCC	360
TTCTTTAGAT ACACGGGCAC AACGCCCTCA CCCCCACCCG GCTCCCACTA CACATCTCCC	420
TCGGAACA TGTGGAACAC GGCAGCACC TACAACCTCA GCAGCGGGAT GGCCGTGGCA	480
GGGATGCCGA CCACCAGACT CGAG	504

(2) INFORMATION FOR SEQ ID NO:923:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:923:

GAATTCGGCC AAAGAGGCCT ACATTCATCA AGTCATCCAA CTTCTATAGT CAAAGCAGGA	60
TCATGTGGCG AAGCATATGC TCCACAAGGG TGGATAGCTT TTTTCATGGA ATTCTCGAG	119

(2) INFORMATION FOR SEQ ID NO:924:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 706 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:924:

GAATTCGGCC AAAGAGGCCT AAAGAGAGTG GAGGAGGAGG ACAAGATTGA TACTATGAGA	60
GTTGGAGGAC ATAATTCATG GATCATAGCT CCAGAAGTGA AAAGGGAGGA AATGTAGACA	120
GAGGAAGGCA TTAGCCATTG AGAAGAATAG GGACATATTT TCTTTACTCT CTTGTCAGAG	180
GAAGATAGCT GGGGGAGTAT AGACAAGTTG TAAGAATGAA GGAAGGAAGG CAAGAGCAGA	240
CTTGTCGGAT GAATTTTATT TTCTCTATGA AGTTTGAGAA TTAAACTTTA TGCTGAGAAG	300
GAGGGCAGGA GAGACTGTAT ATGGAATGTA AGGTTTGGA TAACCAATGT AAGTTTGGG	360
AATGAGAAAG CCACCTAGGG ATGAGGAAAA AATATTTAAA ATTTTGTATC CACTGAAAAT	420
TCTCAACAG TGTAAAATGA AGCATGCTCA ACTGGAAATG GTCATATATC TAAAAGAAAA	480
TGGATTTATT TTGTTATTTT TCTCTATATT TGTAATATT TACAGTAAGC ATGTATTACC	540
TTTATAGTGA AAAAGTGTCA TTTTTTACA TTGGTCAATT TTTTGTATT AAATTTCATG	600
CTTGTTTTTA ATTGTTTCTT GTGTGTATGA TTGCAATATC AGGTATTGA TGTGGTGATG	660
TGTGTGATTC AGAAGTCAGA AGACTTAAGT TCCGACACCC CTCGAG	706

(2) INFORMATION FOR SEQ ID NO:925:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 651 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:925:

```
GAATTCGGCC AAAGAGGCCT AGGATTCAAA TTATTCTGAC AGACCTGTGT GGCAGTTCAG      60
GCTGATAGCT GGAGTTTCTT GTCTTTTCTT ACATGGCCTT TCATCTTCCA AGAGTTAGAC      120
TATGATTCTT CACATCATGA TGGCTTAGGG TCCCAAAAAG AAAAGAGTAG AACTTGCAAT      180
ACCTCTTAAG CCCTATGCCC AAGAACTCAT ACAGTGATAC TTCTGCCACC TTGTGTTAGT      240
CAAAGCAAGT CACAAGGCCA GCCAGATTCA AAAGAATGGA AAAATAGACT CAATTTCTCTG      300
GTGAGAAGTA GCAAGGTCAC ATTGCAAAGG AGTCTGGACA TGGGAAGGAG TTAATCATTT      360
GTGGCCTTTA TAATAATCTT CCACAAATGC CTGTAATTTG GGCAGTGTGC TTAGTACTGG      420
TGATAGAAGA TAAGTAGCTT ATTTCAAGTAT CTTAATTTTG TTTTATATAT TTGATAATTT      480
TATGATGCAG GTTCACTGTG CACTGGTATC AATCCCAGGG GAGGACTGTA AACACCTTGC      540
CAATACTGTG TACCAGTA.C AATCCACTGG CATGAGTCTG GTGAGACAGA ACACACAATA      600
AGTTTAGGGA AGCAACTTTA TTAATCACAG ACAGGCAGCA AGGGACTCGA G              651
```

(2) INFORMATION FOR SEQ ID NO:926:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 700 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:926:

```
GAATTCGGCC AAAGAGGCCT AAAAAGATGA AAGGACCAAT CAAAGATTTA ATTAAAGCTA      60
AAGGGAAAGA TTTAGAGACA GAGAATGAAG AAAGAAATTC TAAGTTGGTG GTGGACAAAC      120
CAGAACAGAC AGTGAAGACC TTTCACTGTC CAGCTGTTGG TTTGGAAAGA GCAGCTACTA      180
CAAAGGCAGA TAAAGACATC AAGAATCCAA TCCAACCATC CTTCAAAATG TTAAAAAATA      240
CTAAACCAAT GACTACTTTC CAAGAAGAAA CCAAGGCTCA GTTTTACGCA TCAGAGAAAA      300
CCCTCCTAAA AGAGAACTTG CCAAAGATTG GCCTAAATCA GGAGAAAGTC GATGTAATCC      360
TTCAGAAGCT GGAGCGTCTT TACTGGTTGG CTCAATAGAA CCTTCTTTGT CAAATCAAGA      420
TAGAAAATAT TCCTCAATTC TACCTAATGA TGTACAACT ACCTCTGGTG ATCTCAAATT      480
GGACAAAATT GATCCCCAAA GACAGGAAAT TCTAGTAAAA TTAATAGATG TGCCTACTGG      540
TGATTGTCAT ATTTCTCCAA AGAATGTCAG TGATGGGGTT AAAAGGGTAA GAACATTATT      600
AAGCAATGAG AGAGATTCCA AAGGCAGGGA TCACCTCTCA GGAGTCCCTA CTGATGTTAC      660
AGTTACTGAG ACTCCAGAAA AGAACACAGA ATCCCTCGAG              700
```

(2) INFORMATION FOR SEQ ID NO:927:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 378 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:927:

```
GAATTCGGCC AAAGAGGCCT AGGGGTGGTG GAGGCGTGGA CCAACGGTG ACCGTCGGGA      60
TGGAGCAAGG GCAAGGAGAG GCTCTGGCCC AGACACAGCT TGGAAAAGCT CATCTCCCTC      120
TGGGGTTTAA AAATCAAAG CAAACGGAGC AAGCCTGGCG GCCCTGGGGA TGGGGCAGGG      180
```

```

CCTCTACCTC ACTGTGATCT TCGACCTGGC GACACAGGAC AGCCACACAG AAGCACGCCA    240
ACACACTTAA AGCTTTGCTC CAACTAAATC ATTTAGTTTC CTTGAAGAA ATAAGTAAA    300
AAAAAAACAA CTGCTGACAT CTATGCTGTG AGCTCGATTT TACAGTCTGC TCTTTGTGAG    360
AAAGGAAAAAT CACTCGAG                                     378

```

(2) INFORMATION FOR SEQ ID NO:928:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:928:

```

GAATTCGGCC AAAGAGGCCT AATATTTAC ATTTCTCTTT TCTAAAAGTG TAAATTTTTC    60
ACTTTAAAT GAAGCAAGAA TTAAATAAAT AGAACAAATA CCATATATCA TCACAGAGTC    120
AATATATTAT GGTCTGTTC TGACCAAGTG TTGCATTGTA TTGTGTGTAC CAGAACTGCA    180
GGGCTTTCTA TGGCTACATG GTCAGTGCAT GCTCAGACAG CTGTTAAAT CAAAACCTTC    240
ACTGTGCTGG GTCACCTGGT AACTACTGTC TATCTCACA GTGCATTCTG CTGACATTCA    300
AGGGTTAAAC TGGTTTCTAG TAAATACTGT GCTTTAAAGT AGTACATACT GTGAGCTGTG    360
TTATTAGAAA CCTGCTTGTC CTTGTGTCTG AAAATAAGGA GGAACACTCT CGCACCAAAT    420
CTCGAG                                     426

```

(2) INFORMATION FOR SEQ ID NO:929:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:929:

```

GAATTCGGCC AAAGAGGCCT AGGTAAATGT TAGTGGAATA TTTTATGAGT ATATGCTGAA    60
AGGAGAGATT AGTTCACATG AACTCAATAA TGTCAAGAT AATGAAATGC TTAGAAAGGT    120
TACTTTTGAT CCAGAAGTAT TTTTCAACAT ATTACTTCCT CCTATCATAT TTTATGCAGG    180
TTATAGCCTG AAAAGGAGAC ATTTTTCG AAATCTTGGG TCTATCCTAG CATACGCTTT    240
TCTTGAACA GCAATTTCTT GTTTCGTTAT TGGGTCAATA ATGTATGGCT GTGTAACGCT    300
GATGAAGGTA ACGGACAAC TCGAG                                     325

```

(2) INFORMATION FOR SEQ ID NO:930:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:930:

```

GAATTCGGCC AAAGAGGCCT ATGGACACCC TGTGCCCCAA GCCGATGGCC CCACCCAGCA    60
GCATCAGCAC AGNTGCCCCC CTTCTCCGCA GAGCAGGCTC TCCTTTACGG GACTCTCCTC    120

```

```

TTCCTCCCA CCTGATGCGC ATCAGCAGCC ACGGGCCTGG CCCTTGAATC TTGTCTAACT    180
GCACTCGCTG CCTGGTGGCC TCATCCCACC CCAAGACCAC TGCCTGATG GCTCCAACCC    240
CAACTTCTCC CTGCACTCAG CTTATGAATA CGACGGCCCT CATTGCATCC ATGCAGAGAC    300
CTCAGAGGCA GCTCAGCTCA GTGCTCAGCG TGGCACTCGG GGCTTCACAC TTCCCCCGT    360
GTCCTGTCTG AGAAACTGT GACACCATCA ACCCAACTAA CTCGAG                      406

```

(2) INFORMATION FOR SEQ ID NO:931:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 246 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:931:

```

GAATTCGGCC TCATGGCCTA CCAGACTGTA AACATTCCAG GTCCTGAAAA AGTGTGGGAC    60
CAGTCTCCTA CTGTTATGTT CTCCAGTTTT AAAAATGTAA AATCAGTTGA AACACTCGAT    120
CAGAAGGCAG ATGAAGTCCT TGAAGTCTAG AGTAACCAA ACAGACCAGA TGAATGCAAA    180
AGTGAAGGTC AGTCAGCCAA GGAGATGCTA AGTAGTGACC AGAGAGAGAC TGTCACCGGA    240
CTCGAG                      246

```

(2) INFORMATION FOR SEQ ID NO:932:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 278 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:932:

```

GAATTCGGCC TTCATGGCCT ACTCCATTGT CAGGCCAATT TCCCCTAGTC CAAGTTTTTT    60
CTTTGCTGAT TCCTTTGTCC ATGTGTGCTT TGAGCCTCTC TCATCTTGTC TTTCTCTCTT    120
TCCTAGGAGC AGCTCCTGAA GCAGCAGCAG CAGCACCAGT GGCAGCAGCA TCAACAGGGC    180
TCTGCCCCCT CTACCCAGT GCCCCATCA CCACCACAGC CTGTGACCCT GGGGGCTGTG    240
CCAGCTCCAC AGGCTCCACC CCCGCCAC AACTCGAG                      278

```

(2) INFORMATION FOR SEQ ID NO:933:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 421 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:933:

```

GAATTCGGCC TTCATGGCCT ACAGTGCGA CCAGCCAGAT GAGCGCCCGG TCCTGGTGAA    60
GAGCATTAC TACCTCTACT TCTCATGAT CCTGTCCACG GTCACCTCA TCACTGTCTC    120
CACCGTGAGC TGGTTCACAG AGCCACCCTC CAAGGAGATG GTCAGCCACC TGACCTGGTT    180
TACTCGTCAC GACCCCGTGG TCCAGAAGGA ACAAGCACC CCAGCAGCTC CCTTGTCTCT    240
TACCCTCTCT CAGAACGGGA TGCCAGAGGC CAGCAGCAGC AGCAGCGTCC AGTTCGAGAT    300

```


GGTTCAAGAA AACACGTCTA AAACCCACAG CTGTGACATG ACCCCAAAGC AGTCCAAAGT 360
 GGTGAAGGCC ATCCTGTGGC TCTGTGGAAT ACAGGAGAAG GGCAAGGAAG AGTCCCGGC 420
 C 421

(2) INFORMATION FOR SEQ ID NO:934:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 449 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:934:

GAATTCGGCC AAAGAGGCCT AAAATAGCAA AGATGGAACA TGGACCTAAA GCAGTGAATA 60
 TTGCAAATTC TCCATCAAAG CCTTCAGAAA AGGATTCTGT AGTTTCCCTT GAGTCCCAGA 120
 AGACACCTGC TGACCCAAAA CTGAAACTC TAAGTCAAAC CAAAAAAGC AAAGGATCTG 180
 ATAGCTCACT CTCTGGTAAC AGTGATGGCG GAGAAGAATT TTGTGAAGAG GAGAAGGAAT 240
 ATTTTGATGA TAGCACAGAA GAAAGGTTTT ACAAGCAGTC TTCCATGTCT GAAGATAGTG 300
 ATAGCGGTGA CGACTTCTTC ATTGGGAAAG TCAGACGGAC ACGAAAGAAG GAAAGTAGTT 360
 GTCATTCTTC AGTTAAGGAA CAAAACCCAC TAGAAAAAGT GTTTCTTAAA GAAGATACAG 420
 GTGAAACTCA TGGGGATACA ACTCTCGAG 449

(2) INFORMATION FOR SEQ ID NO:935:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 421 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:935:

GAATTCGGCC AAAGAGGCCT AAAAATAGTG ATTTTTTGAC TATCTATAGA TATTAGTTGG 60
 CATTCTACTG TAAGGAAAAC TTTCTTTCTT CCTGTACTTA TTCATCGTCC CCCAGGAATC 120
 AGTCATTTT CCAAGGAGAC CTAGTTCCTT TTTGTGAGGA GTTGTTTTGA GTTCATTTT 180
 AAGTTCATT GAAGTTTGA GTTCATTTA CTATAATCTG CCTAGGTGTG ATTTTCTTTT 240
 TATTTATCT GCTTAGGATT TGCAGAGATT TTTTGAACC TGTGGCTTGA TGTCCATCAC 300
 TTTTGAAAT TTCTCAGCCA GCATAGTATC TGCAGACTGT GTGTCTGTT CATTTTCTCT 360
 CTTTTCCTT TGTAGGACTT CATTACAAG GATGTTAGAA CTTTTCACCA TGGCTCTCGA 420
 G 421

(2) INFORMATION FOR SEQ ID NO:936:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 648 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:936:

GAATTCGGCC AAAGAGGCCT ACAGGTCTAC TGGTAATGAT TTCCTTACC TTCTAATTAT 60

```

ATAGAAATGT CATAATTTCT CCTTTATTCT TGAATGATAG TTTTGTGGGA TATAGACTTG      120
CTGGATATAG AATTACTGGA TATAGAATTG CCAGATATAA AATTCTTGGT TCAAAGTTTT      180
TTTTCTTTGA GGACTTTGAA TGTCATCCCA CTGTCTTCTG GCCTCCATAG TTTCTCATAA      240
TAAATCAGCT GTTAATCTTC ATTAAGTTTC CTCTGTACAC GAAGAGTCAC TTGTCTCTTG      300
CTGCTTTCAA ATTTTCTCA TTTGCTTTGG GTTTTCACAC TTTAATTATA TGCCTTTCTA      360
TGTGGATCTC TTTGAGTTTA TCCTGCTTGG AGTTCATTGA GCTTTTGTGA TCTGTATATT      420
AATTTCTTTC ATCAGATTG GAGATGTTT TGGCATTAT TTCCTCAAAG TTCTTTCTGC      480
TTCTTTCTCT CCTTCTCCTT CTGGGTCACC ACAATGCATA TGTTGGTCTA CTTGATGATG      540
TCTCACAGGT TCCTTAGACT CTGTTTACTT TTCTTCATAT TTTTCTTTT CTGTTTCTTA      600
AATTGGATA ATTTGGTTG TCTTATATTC AAGTTTGCTG ATCTCGAG                      648

```

(2) INFORMATION FOR SEQ ID NO:937:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:937:

```

GAATTCGGCC AAAGAGGCCT AGAGGATGGG AAGCTTGGGG AGAGAAGATA CTGAAATGCT      60
AGAAACTGAG CCAGTAGAGG ATGGGAAGCT TGGGGAGAGA GGACATGAGG AAGGATTTCT      120
GAACAACAGT GGGGAGTTCC TCTTAAACAA GCAGCTCGAG                      160

```

(2) INFORMATION FOR SEQ ID NO:938:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:938:

```

GAATTCGGCC AAAGAGGCCT AGAAAACTC AGGAAAGAAA TTGCAGACTT CGAACAACAG      60
AAAGCAAAAG AATTAGCTCG AATAGAAGAG TTAAAAAGG AGGAGATGAG GAAGCTACAA      120
AAGGAACGTA AAGTTTTTGA AAAGTATACT ACAGCTGCAA GAACTTTTCC AGATAAAAAG      180
GAACGTGAAG AAATACAGAC TTAAAAACAG CAAATAGCAG ATTTACGGGA AGATTTGAAA      240
AGAAAGGAGA CCAAATGGTC AAGTACACAC AGCCGTCTCA GAAGCCAGAT ACAAATGTTA      300
GTCAGAGAGA ACACAGACCT CCGGGAAGAA ATAAAAGTGA TGGAAAGATT CCGACTGGAT      360
GCCTGGAAGA GAGCAGAAGC CATAGAGAGC AGCCTCGAG                      399

```

(2) INFORMATION FOR SEQ ID NO:939:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:939:

```

GAATTCGGGC AAAGAGGCTA GAAGCATCGA AAGCGTTGGA GAGGTGTTAC CGGTAACGGC      60
GGCGAGAAGG GTGTTCCCGA ACTAGAGTGG GGCATACATA ATCTTGCTGC TATGCTTCGA      120
AGCTGTAGTC TGAATCAACC TAAGTTTAA ACAGAAGGTG AACCTCTGAG ATAGAAAATC      180
AAGTATATTT TAAAAGAAGG GATGTGGGAT CAAGGAGGAC AGCCTTGGCA GCAGTGGCCC      240
TTGAACCAGC AACAATGGAT GCAGTCATTC CAGCACCAAC AGGATCCAAG CCAGATTGAT      300
TGGGCTGCAT TGGCCCAAGC TTGGATTGCC CAAAGAGAAG CTCAGGACA GCAAAGCATG      360
GTAGAACAAC CACCAGGAAT GATGCCAAAT GGACAAGATA TGTCTACAAT GGAATCTGGT      420
CCAAACAATC ATGGGAATTT CCAAGGGGAT TCAAACCTCA ACAGAATGTG GCAACCAGAA      480
TGGGAATGC ATCAGCAACC CCCACACCCC CCCCTCGAG      519

```

(2) INFORMATION FOR SEQ ID NO:940:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:940:

```

GAATTCGGCC AAAGAGGCCT AAGAAATTAT ACCATTTTAT GGAATGTCAA GCTACATCAC      60
CCGAGAAGAC CAGTACAGCA AGCCTCCGCA CAAAAAATG AAAGACCGCC AGATCGATCG      120
CCAGAACCGC CTCAACAGCC CTCCTTCTTC TATCTACAAA AGCAGCTGCA CAACAGTATA      180
CAATGGCTAT GGGGAAGGCC ATAGTGGTGG AAGTGGCGGA GCGGCAGCG GTAGTGGTCC      240
CGGAATTAAG AAAACAGAAG CGCTCGAG      268

```

(2) INFORMATION FOR SEQ ID NO:941:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:941:

```

GAATTCGGCC AAAGAGGCCT AAGCCTCGCC TTACACTTAA GTGCACCCGA TCCTGCCTCT      60
GGCATCTCAC AAACGTCCT CCCTGGAACA AATTTGTGAA GGCCTCCAGA CCACAGTGTC      120
CTCATCTGTA AAATGGGGGT AGTAGTAATC CTGCTCAT AAAGTTCTTG GCAAGGATTA      180
GATGAGCGAG CATGTGAGTT TGGCCTCCGT TAAACACTC CATAAAGTTT CCTTTTAGGA      240
TAACAGCAGG CCGTTTTAGA ACCTTCCAGA GGTACTTAT TCAGATATCC TTAGGTGACG      300
ATTGGAAGC TGCCGTTTCT TGAGAGCCTC CTGGGTGACA GATGGAGAGT GGCCCTGGCG      360
TGACCCTTGA CCCTATCCTT GAGGCTTTC TGCCCGTCTC CTGCCTCGAA TGTGCTCCGC      420
AGCACATGGA TCAGGATGGG GAAGGGGCTG TGCACTGGA TACCTTCGGC CCCTGCCCAC      480
GTCTAGGGCC TGTGAAAACG AGGAGGGACA GCAAAGAAAT GGGGAAAGGC TCGAG      535

```

(2) INFORMATION FOR SEQ ID NO:942:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:942:

```

GAATTCGGCC AAAGAGGCCT AAAATTGTGA ATTCTAGTCA CCCTGCAGTG CTATAGAACA      60
CTGGAACTTA TTCCTCCTAT ATCACCGTAT TTTTGTATCT ATTAACAAAC CTCTCCATAT      120
CCTCCCTCCC TCCTACCCCT CCCAACCTTT GGTAATCACT ATTCTCCTCT CTAATTCTAT      180
GAGATCAATG TCTTTATTTA CTCGAAGTAC TCTTAAAGT TTAGGACTTA AGTATTTGAA      240
GAAATTCAC TGCCTTTTGT TTTTATTCTA CTCAATACTT TTTAATATAA AGATTTACAG      300
TCCCCCCTTA CTCGAG                                     316

```

(2) INFORMATION FOR SEQ ID NO:943:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:943:

```

GAATTCGGCC AAAGAGGCCT ACAAACCTCA GATGCCCGAG TGGATTGGAG GCGAGAGCGA      60
GCTCAGGAAG TTTCTAAAC ATCATTGCG AGGAAAGAAC TGTGAACCTC TGCTGGTGGT      120
ACCAGAAGAG GTAGAGGCTC ATCAGAGTTG GAGGACCGAT GTGTAACAGT TCTGCCCAAC      180
CTCCCTCTCG CCTCAGCCCC TTCAGTCCTC TGTGACGTGC TGTGGCCTCT ACAGTGGGTC      240
TGCCCTTGCC ACTTCCCCAA ACATCTCATC AAGTTTTTCC CCTTCAGATC TGACAGTGCA      300
ATAGGACAGA CGTGTGGACT GTTATAAGAA CTACTCAGTG TTTTGTTCCT GGGCAAACCTC      360
GAG                                     363

```

(2) INFORMATION FOR SEQ ID NO:944:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:944:

```

GAATTCGGCC AAAGAGGCCT ACTCTGACAG TGTTTCTGAC CTTTAGCATT TCTTTTGGAT      60
TCTTTCTTAG AATTCTCATC TTCTGCTTAT ATACCTGTCT ATTCTTGCAT GCTGTCTACG      120
TTTCCCATGA GAGTCCTTAG CACATTAATC ATGGTTGTTT TACATTACA GTCTGGTAAT      180
TCCAGCATCC CTGCCACATC TGAATCTAGT TCTGATGCTT GCCCTGTCTC TTCAAACCTCT      240
GTTTTTTTGC CTTATAATCT TTTGTTGAAA GCCGAACATG ATTCCTGTAC TGGCTCTTCT      300
GGAGGCTTCT GCCCTGTTCT CGAG                                     324

```

(2) INFORMATION FOR SEQ ID NO:945:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 712 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:945:

```

GAATTCGGCC AAAGAGGCCT ACAGATGACT TCATTCTCTCT TGGATTCCAC TTTCTCACGT      60
GTCAGAAATGG GAGAGGAAGG GAGGTGTTGG GATAAGTTTC AGTTCCACTG TTTGTACTTC      120
TCGTCTGGCT AACACCCATG TGGCAAATAG GTTTCATCAT TTGTTTCAGC TTAGATTTGT      180
TGACAGCGGT TTCCTGGAGT GCTGTCTTGA GAACGATTCT GAGGAGGCTC AGCAAGAAAG      240
AGTGTTTCAG TTGATTGGGT GTGTCTGTCA TGGAGAAGGA AGTAAGGAGT GGGCAGTGCT      300
AGCAAAATTC CCGGGGCACT TCTGTCCATT ATCTCAATAC CTGGGGTTGA CATTTCCTGT      360
CTCAGATCAG GAGTCCTGAC TACCCTGCCT CTGACCACTC GAACTGAGTG CTGCTTAGCT      420
GTATCGTAGA CACCGCCTGT TTGTGAACAG ACACCCTGCT TCTTGATAAC ACAAGGCCA      480
GCAGGGTCCA CTGCTGTGTG GAATGGCCTT CCGTCATTTC TGCCCAGAGC ATAGAGGTCA      540
TTTTCACTAA TAACATAACT CTCCTTTTGA TTGAAAGTGT TAAAATGTTC CTCCTAAAAG      600
CACTTATTTT TTAGGCTCGT TCTTCAGATT TGCCCCATAT CCTAAGCAAA ATGCCTTCAA      660
TATGAAGTGG ATATTGCTTG ACCGTAGGGA GCTTGTCCAT ACTGTACTCG AG              712

```

(2) INFORMATION FOR SEQ ID NO:946:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:946:

```

GAATTCGGCC TTCATGGCCT AGTCTTGAAG GATAAGACTT GCCCAAGTGG ATAAGGGGCG      60
AAAGGCATCC CAAGAGGAGA CAGTAACGTG TGTATAAATG AACGAAGGCG TGAATAGGA      120
TGGAGTGTTT TGAGGAACCA CAAGTAGCCT TCTCTGAGTA AGAGCATAGG TTTGTGAGGA      180
GGACCTAGTG TTGTTTGAAA AAAGAGAGTG ATCAATGGAA GATGAGATAT CAAGACAGGA      240
GAACCAAGGA AGAAAAGCA GAGGACAGCT GGAATGAATC AAACCGAAGA ACCAGGATCC      300
TCGAG                                305

```

(2) INFORMATION FOR SEQ ID NO:947:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:947:

```

GGGTTTTGTT AATGGAAAGT TTAAGTAAAT TATATTGTAA TAAAAAGGTA GATAAACCAT      60
TGTACAACAG TATTCTAGGC CGCCAACAAA AGTGTGACAG ACACACTAAA AGCCCTCCAA      120
CTTTAAGTTG TAACGTAGCT TCATTCTCAA AGCTGACTCC TTTTCTTTCT TTTTCCTTTT      180
CTTGAGTGTA GTACAGTTAA AATTTCAAAC AGCTCCTTGA CACTGCTTTT CATGTTCAAA      240
CCAGCCATTT TGTGTACTT TGGTAAAGGA CCTCTCCCC TTCCTCCCCT ACACATACAG      300
ATACACCCAC CATAACTCGA G                                321

```

(2) INFORMATION FOR SEQ ID NO:948:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:948:

```
GAATTCGGCC TTCATGGCCT ACAAAGGCA ACAAACAAGA TTAACATGGA ATTATAAAAA    60
TCACTCAATC CAAAATAAGG CAGAAGAAGT GGAAAAGGGA GATGAAGATC AGATGGAACA    120
AAGAATATTA CTAGAAATGA CTATGTTTTA TAATGCAAAA TAGTTCAGTA CAGGAGAAAG    180
ATACAATAAT TTGAGTGCAT ATGAACTTAA AAGAGAATT CAAAATATAT GAAGCAAAAA    240
TTGACAGAAC CCAAAGGCA ACAAACAAGA TTAACATGGA ATTATAAAAA TCACTCAATC    300
CAATATCTCG AG                                     312
```

(2) INFORMATION FOR SEQ ID NO:949:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:949:

```
GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGGGA GCCTCAAGAA AAATTAGCAG    60
AGGAAAATAA TAGGTAGTTA CTATTAGGG TAAACTAAAC TGTCTAAGG AATAGAAAAT    120
AAAAATTCCA TGTCTTCAA AATAATTCTT CCCTCTCAAT CTCTCTGAAT ATCTCATAAG    180
AGTATTGAGG CCACAGAAAT AACTACCATT TAGCCACTCA GAGGCTTATA GTAGTTCTAC    240
TAACTTTAAC ATTTGGCAAC CAAAATTACT CTAAGAATCA TCACCCTCGA G          291
```

(2) INFORMATION FOR SEQ ID NO:950:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:950:

```
GAATTCGGCC TTCATGGCCT AGATGGGCAT TCTGTTTATC TTACTAGTAG TACGCAGGGT    60
ATGTTGAAAT CTCCAAGTGT GATGGTGGAC CTGTCAACTT CTCCTGTGG TTTTATCAGT    120
TTTTCCTGGG TATTTTGAGG CTATTCTGAT AGGTACATAA AATACAAAA TTGCTATATC    180
CTCCTAATTA ACATTATTA TCAAATGTT ACTAATGCTT TCTGTTCTTA GGCCATGAAG    240
```

(2) INFORMATION FOR SEQ ID NO:951:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:951:

```

GAATTCGGCC TTCATGGGCT AGATCTGAGC TCACTGCAAC CTCTGCCTCC AGGGTGCAAG      60
CCATTCTCCT GCCTCAGCTT CCCAAGTAGC TGAGACTACA GGCGTGTGCC ACCACGTTGG      120
CTAATTTTGT TATTTTGTAGT AGCTTTTTTT TTAAACCCT GAGTGTGAGG TGTGAGGTAG      180
TAGAAGAAAG GTAGTGTGTG TGACAGCTTG TGAGTACTTA ACTAATTCTT GTTGCATTCA      240
CTATAATATG GTAGTTGTGT ATACATTTAT AGGCAATTAG GAATAGGGAA CAGAATCAGC      300
AGATACTAAC GGAGTTAGAG ATGTTTGCTG AAGTCATGGA AAGCCATCAT TACTTTTTTC      360
TTCCTTCCTC ATAAGGCCTT AGTGGGTGTG GCGTTCAGCT CGAG                        404

```

(2) INFORMATION FOR SEQ ID NO:952:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 382 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:952:

```

GAATTGGCCT TCATGGCCTA GAAAAATCAT GTGGGAAAAC CACTGCTGAA AATGGATTTA      60
AATTCAGAAC AGGCGGAACA ACTGGAAAGA ATCAATGATG CTCTTTCCTG TGAATATGAG      120
TGCCGCCGAC GAATGTTAAT GAAACGATTA GATGTGACTG TACAGTCCTT TGGATGGTCT      180
GATAGAGCAA AGGTAAAAAC AGATGATATA GCAAGAATTT ATCAGCCTAA GCATTATGCT      240
TTGTCACCCA AGACAACGAT TACAATGGCA CATCTACTTG CTGCTCGTGA AGATCTATCC      300
AAGATCATTG GGACAAGTAG TGGCACCAGC CGGGAGAAGA CCGCATGTGC CATTAATAAG      360
GTGCTGATGG GAAGGGCTCG AG                                         382

```

(2) INFORMATION FOR SEQ ID NO:953:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 268 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:953:

```

GAATTCGGCC TTCATGGCCT AGTCCCTCTT CCACTGCATT TCGGCTTCAT ACATGCACAT      60
GATGTCCTCC TCCTTGCACT CAGTGATGTC TGGCACGCGG CGGTACTGCC GGTGGTAGTA      120
GTAATACCTG TTCTTTGCGT GCTGCCGCTC TATAAATTCT CTCACGAGGG TCACGGGTCG      180
GTCCACGATG AGGTCGAACG CTTTCATCAT GTAGACGATG GGATTGGGCT GCACCGGCGT      240
GCGGCGCGGG GGCTCAGGCT CGCTCGAG                                         268

```

(2) INFORMATION FOR SEQ ID NO:954:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 260 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:954:

```

GAATTCGGCT TCATGGCCTA AAGATTCTGC TCTTTATACA CAGAACTTTG TATAGAGTTC      60

```

```

TGGAATGAGG AAGTGTGAGG AGGGAATCAG TGCCTCTCGG AAGTCGTTTT AATTAGAATG      120
TGATTTTTTT TTCTTAAACG TGTCTTCATT GGCTCCCAGA TTTGCCGTAG AAACCAAGCA      180
AACTGGGTGC TAAAACAGAA AGGCCCATAG ATTGTACTTT TTGAGCTGTT TGAATTGTGA      240
TACCATATGC ACAACTCGAG                                     260

```

(2) INFORMATION FOR SEQ ID NO:955:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 129 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:955:

```

GAATTCGGCC TTCATGGCCT AATCCGAGTG TTTCGCGCAC GTCCTAAGCT GACAGTCCCT      60
CTGGACAGAG TCCCTGGAGT GGAGTCACTG CTCCTTGCTCT TTTTTCATA ACATACACTC      120
ACCCGTATG                                     129

```

(2) INFORMATION FOR SEQ ID NO:956:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 404 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:956:

```

GGCTAAACAT GGAAATGAAA GACTGATACT TGCTACCACA AAAANANACT TAAGCACATA      60
GATCATAGAC AGTATAAAGC AATTAGACAA TGAAGTCTAC AAAACAACCA GTTAACAACA      120
CAATGAGAGT ATCAAATCT TACATGTCAA TACTAACCAT GAATATAAAT GATCTAAGCC      180
CCCCACTTAA AAAGCATAGA GTGGCAAAC TGGATAAGAG ATAAGACCCA ACTGTCTGCT      240
GCCTTTGAGA GACCCATCTT GCATGTAGTG ACACCCACAA GCTGAAAGTA ATGAGATGGA      300
GAAAGATCTA TCATGCAAAA GGAAAACAAA AAAGAGCAAG TATCACTATT CTTATATCAG      360
ATAAGACAGA TTTTAAACCA ACAACTATCA AGAAGAACCT CGAG                          404

```

(2) INFORMATION FOR SEQ ID NO:957:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 283 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:957:

```

GAATTCGGCC TTCATGGCCT AGACTCTCTT TATACAATTC ATCAAGGTTA AACAAAACAT      60
AAAATTCCTT TAAAAATAGG GTAATAAAAT AGATGAAATT TGTATCACTC AATTTGGTGA      120
TACTAGTAAA AACTATAGTT CATATTTATA TACAAATAAT ACAGTCTGTA AAAACAGTCT      180
TAGAATTTAA ATAAGCTATC TAAACGTGTT AAAATTTTAA ATCAGGACCT GATTTGTTTT      240
GCTTTCCATT AAATGTCACA TTGAATTCTA GACCTGCCTC GAG                          283

```


(2) INFORMATION FOR SEQ ID NO:958:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 309 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:958:

```
CTCGAGGACC TGGTCGTGAC CAACTATAAG ATGGGGGGGC GACATTGCCA ATGGGGTACT      60
TCGGTCCTTG GTGGACGCAT CTAGCTCAGG TGTGTCAGTA CTGAGCCTGT GTGAGAAAAG      120
TGATGCCGTG ATTATGCAAG AAACAGGGAA AATCTTCAAG AAAGAAAAAG AGATGAAGAA      180
ACGTATTGCT TTTCCACCA GCATTTTGGT AAATAACTGT GTATGTCAC TCTCCCCTTT      240
GAAGAGAGAC CAGGATTATA TTCTCAAGGA AGGTGACTTG GTAAAAATTA GGCCTCTTTG      300
GCCGAATTC
```

(2) INFORMATION FOR SEQ ID NO:959:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 149 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:959:

```
GAATTCGGCC AAAGAGGCCT AGATTGAATT CTAGACCTGC CTCGGACTAC TGCAAGTGCT      60
TAAAGGCATT ATTCATAGA CCTTACAACT ACCCATATAA CATTATTATC TTCATTTTAT      120
AAATGAGGAT AATAATGTTA TATCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:960:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 455 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:960:

```
GAATTCGGCC AAAGAGGCCT ACACCGTAAT ACTATAATAC TATATAATCT GTTTGTTAAT      60
TTTCTGAGAA TAATAACTCA ATGGAGTAAC TCTTTAATAG GCATCTTTTC CTTATAAAAA      120
ATATTGTAGA TTGGCTCTCT GCAAGCTAAT TTCTTTTATA TGGTTAATAT TTTAGTGTAC      180
ATTAAGAGCT TAGAGTTCTT TTGTAAATCA AGCTTGCTAC AGAAGCTGTG CTTTATTTAT      240
TTCATAGTAA TTTCTCTAG TGGGTCATTG TATAAACCCCT GATCATTTTT GTATGCTCTAT      300
TCCTTTTCTT GCGAAGTGGG CAGCTTGTTT AGCCATGGTG TTTGGCTTC AATAGTGAGG      360
TCTCTATTG GGAATCTCTG AATTTCACAG GAATGAGTAG AACTATATTT AACATGAAA      420
AAAATAGTAT TAGATTTTAG GGCAGCTGGC TCGAG
```

(2) INFORMATION FOR SEQ ID NO:961:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 207 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:961:

```
GAATTCGGCC AAAGAGGCCT ACCCTGTCTT TATGCTCCAA TGCTTCTTTC TCCAGATATG      60
AAAGGAGATG CTCTCTATCA AATGGCCCTG TGGTGGACTT TGATGTCTGG TTCTTCTGCC      120
GGAACCCCTGC TGGCTTTTTC CTGTAGCTCC ACATTCCTGT GCATTGAGGG GTTAACATTA      180
GGCTGGGAAG ATGACAAAAC TCTCGAG                                         207
```

(2) INFORMATION FOR SEQ ID NO:962:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 247 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:962:

```
GAATTCGGCC AAAGAGGCCT ACTGTAGTAT TAAATATCT GTTACAGGTT TCCAAGGTGG      60
ACTTGAACAG ATGGCCTTAT ATTACCAAAA CTTTATATTT CTAGTTGTTT TTGTACTTTT      120
TTTGCATACA AGCCGAACGT TTGTGCTTCC CGTGCATGCA GTCAAAGACT CAGCACAGGT      180
TTTAGAGGAA ATAGTCAAAC ATGAAGTAGG AAGCCAGGTG AGTCTCCTTT CTCCAGTGGA      240
TCTCGAG                                         247
```

(2) INFORMATION FOR SEQ ID NO:963:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 472 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:963:

```
GAATTCGGCC AAAGAGGCCT ACAAGAACAT GAAACATCTG TGGTTCTTCC TTCTCCTGGT      60
GGCAGCTCCC AGATGGGTCC TGTCCCAGGT GCAGCTGCAG GAGTCGGGCC CAGGACTGGT      120
GAAGCCTTCG GAGACCCCTGT CCCTCACCTG CGCTGTCTCT GGTGGCTCCA TGAATAGTCA      180
CTACTGGAGC TGGGTCCGCG AGCCCCCAGG GAAGGGACTG GAGTGGATTG GATATATCTC      240
TGACAGGGGG AGCACCAACT ACAACCCCTC CCTCAGGAGT CAACTACCA TATCACTAGA      300
AACGTCCAAG AACCAGTTCT CCCTGAATTT GTTCTCCGTG ACCGCTGCGG ACACCGCCGT      360
ATATTACTGT TCTCGTGGGA CATCCCCCCC CCCCTCCTAC TACTACTCCA TGGACGTCTG      420
GGGCAAGGGG ACCACGGTCA CCGTCTCCTC AGGGAGTGCA TCCACCCTCG AG              472
```

(2) INFORMATION FOR SEQ ID NO:964:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 303 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:964:

```
GCTCGGCTCG CTGCAACCTC TGCCTCCCAG GTTCGAGCGA TCTTCCTGCC TCGGTCTCCC      60
AGGTAGCTGG GACTACTGGC GTGCGCGACC ACGCCAGCT AATTTTGTG ATTTTGTAGT      120
GAGACGGGGT TTCACCATGT TGGCCAGGAT GGTCTCAATC TCTTGACCGC GTGATCTGCC      180
TGCTTCGGCC TCCCAAAGTG CTGGGATTAC AGGCTTGAGC CACCGCATCC AGCCAACATT      240
TTTCAAATAG AAAATCTGAA GCTAAAATCA CCCCTAAAGG ACAAATAACA GGACTATCTC      300
GAG                                                                    303
```

(2) INFORMATION FOR SEQ ID NO:965:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:965:

```
GAATTCGGCC TTCATGGCCT ACTAGATTAT GGATTTTTTT ATTTCAATGG AAGTGAAGTT      60
CAAAGATGCC AGAGTGGTAC AGTTCGAACA AACTGCTTGG ATTGTCTTGA TAGAACAAAT      120
AGTGTGCAGG CATTTCTTGG CTTAGAGATG CTAGCTAAAC AGTTGGAAGC TCTTGGTTTA      180
GCTGAAAAGC CTCAGTTGGT GACTCGCTTT CAAGAAGTTT TTCGGTCAAT GTGGTCCGTG      240
AATGGTGATT CAATCAGTAA GATATATGCA GGAAACTCGA G                                                                    281
```

(2) INFORMATION FOR SEQ ID NO:966:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:966:

```
GAATTCGGCC TTCATGGCCT AGACGTGATG TGTGAGAGA AGAATGTTCT AGGCAGAGGC      60
AACAGCAGAT GCAAAGGTCT GAAGGGGAGA CAGACCGAGC TAGAAAAGCA TGGCACATCA      120
GTGATCTAAG TTCGTGTGGT TTCCTAAGGT TGGAACCTAG GGTGCAAACT GAGGATGGGC      180
AGATGAGGTG GAAGAGGAAG AGCAGACCCA GGTCACAAAG ATCTTTGTG CTAAGGATTT      240
TTAAGCAGGT AGGAGGAGAG AGAATATGAG CCTTGGGATT TGAAGTGTG TGGGTGTACA      300
GAAAAAGAGA AACTCAACGA GAGGTTTAGG TTAGGGACG TGGTAGGCTT TTGCAGTAAG      360
GGACAAGGAC AGAAGGCTCA TCTGAGGATG GGAGGGACAC TTAGAGGCA AATCCATAGG      420
ATGCAGTGGC TGAACAGAAA AGGTGAATCT CGAG                                                                    454
```

(2) INFORMATION FOR SEQ ID NO:967:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:967:

GAATTCGGCC	TTCATGGCCT	AGTCATTAA	TTTAACTTAG	CAAACTCCA	ATAGTGTAAG	60
TTAACAGATT	TTGGAACTG	GTTTAAAGTA	GATGTATTAT	AACATAAAAC	AAAGCTAGCC	120
ATTATCAAGT	TATTTCTTG	TTAGCTATTT	TTACAGCATG	TGCATGTTAG	GTAGTCATCG	180
TGAAAGCAAG	AATCTTAACT	TAAATACATG	TTTTTTTGT	TTGTTGTTT	TACTGCTGTG	240
CTGTATAATA	CATGATGCTG	TTAGCAGCGG	AACGTATCAG	AGACACGGCA	CCAAAGTATG	300
TTACTGTCGG	CGAAACTCG	AG				322

(2) INFORMATION FOR SEQ ID NO:968:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:968:

GAATTCGGCC	TTCATGGCCT	AGACTGCTGG	CATATCCACC	CCACCTGTGC	TGCTGCCCCC	60
GCCAATCCAT	CAGGGCAGCT	CCGACTCCTG	CAGCACCCAC	CGCCCAGGAC	GTCAGCTACT	120
CAGGTTTTCT	GGCTGCTGGG	GTTCCGCACG	AATGGGCCCT	TCTTTTGGGA	AAATGCCAGG	180
GAAGGGGAAC	GGCTGGGCTC	GGGCGCCACA	GCTTGTCCCT	CCAGCCAGCA	GGCAGAGATG	240
TATGGCGCAG	GAGGGACAAC	TGGCCCCGTG	GGCCAGCCCC	AGAGAGACGG	GCCCTTTCTT	300
TGGGACCCTG	GCCTCAGAGG	CCTGCGTGTC	ACAGCTCAGG	GTCTGGCTGG	GCAGGGGCAA	360
AACCTGCCTT	ATTTGCCAGA	TGTCCCAGAA	GTACACAGGA	GCAGACGCAC	CACTTCGATG	420
GCTATTTTAG	GAGGCTGGTG	ACAAGCAAGG	CATGGTGGCA	GGAAGCCAGG	CCCTCGAG	478

(2) INFORMATION FOR SEQ ID NO:969:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:969:

CTCGAGGTCC	CTGTCCTGCT	CAGTTTCTCT	TCAATGTGGA	AGTCCTGGGA	GGTCAGTCTC	60
ATGAGAATAA	GGTGCTGTAC	TTTCACAGCC	TTCTCAGACT	TTTCTGAGGA	TGGCCTTACA	120
CTTGCCAGCT	AGTGGAGTGA	GCAGAACTCC	TCCTGGTTTC	TGTGGCTGTT	CTCAGAATGC	180
CCTAGTTCAC	TTTCCAGTAA	TACTTTTTTG	GGAACATTTT	GTGTTTCTCA	TTTTCTCAGG	240
TCCCCCAGGC	ACACCATCTT	TCCTCTGCTT	CCTCTCACAC	AGGTGCTGAT	ACTGTGTAGG	300
TTTGGGGCTG	TTGTTCTGGC	CCACTCCCTG	ATATTTTCTG	GGTTTGTAC	CTAGTTTTCT	360
TAAAAGTATC	ATCTACATGG	TTTTGGTTTC	ACTATCTATT	CTGTCTTTAT	TTGAACACTA	420
GGGGAAATTC	ATTATGCCAA	TCTCACACAT	TGTGTGATTC	CATTAGGCCA	TGAAGGCCGA	480
ATTC						484

(2) INFORMATION FOR SEQ ID NO:970:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:970:

```
GAATTCGGCC AAAGAGGCCT AGGCAAAATG AAAATACTTG TGGCATTCTT GGTGGTGCTG      60
ACCATCTTTG GGATACAATC TCATGGATAC GAGGTTTTTA ACATCATCAG CCCAAGCAAC      120
AATGGTGGCA ATGTTCAAGG GACAGTGACA ATTGATAATG AAAAAAATAC CGCCATCATT      180
AACATCCATG CAGGATCATG CTCTTCTACC ACAATTTTGT ACTATAAACA TGGCTACATT      240
GCATCCAGGG TGCTCTCCCG AAGAGCCTGC TTTATCCTGA AGATGGACCA TCAGAACATC      300
CCTCCTCTGA ACAATCTCCA ATGGTACATC TATGAGAAAC AGGCTCTGGA CAACATGTTT      360
TCCAGCAAAT ACACCTGGGT CAAGTACAAC CCTCTGGAGT CTCTGATCAA AGACGTGGAT      420
TGGTTCCTGC TTGGGTCACC CATTGAGAAA CTCTGCAAAC ATATCCCTTT GTATAAGGGG      480
GAAGTGGTTG AAAACACACA TAATGTCGGT GCTGGAGGCT GTGCAAAGGC TGCACTCGAG      540
```

(2) INFORMATION FOR SEQ ID NO:971:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 289 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:971:

```
GAATTCGGCC TTCATGGCCT AGCCAGTCTC AGCACTTAAA CAACCAGGTG TTGAAGGACT      60
ATGTTCCAAA GAACAGAAGA GAGTATGGTT TGCAGATGGT ATATTGCCCA ATGGTGAAGT      120
TGCAGATACA ACAAATTAT CATCTGGAAG TAAAGATGT TCTGAAGACT TTAGTCCTCT      180
CTCACCTGAT GTGCCTATGG TAAGGAATTC AAAGAATACT TAATTGACTA AACAAAATTT      240
TATTTCTAG ATAATTCCTG GTGTGATTAT TAGAGTGCTT TTTCTCGAG      289
```

(2) INFORMATION FOR SEQ ID NO:972:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 418 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:972:

```
GAATTCGGCC TTCATGGCCT AGAGCTGGG AGGTTGAGGC TGCACTGAGC TATGAGCTGC      60
ACCACTGTAC TCCAGCCTGG GTGACAGGGC AAGACTCTGT CTCAAAAAC AAAAACAACA      120
ACAAAACTT TATTCCTAAA AAGTGCTGAC CCAGAGATAA GAAGCAAGCA CATGGTTGGT      180
AAAATGACAT CAGTGAGCTT GCTTTATGCA GGGTTGCCCC AAACCTTCAA TTTGTAAAC      240
TCAAAATATC TGGAAAGCTT GGTGAGGCGA GCGGGGACTG TAACCTAGCA CTCACCGCAG      300
GGTGAGACCC TTAGGGCAGC GGGTGCTACA CTGAACAAAG CGGTGAACAG CCCCTCGTG      360
AGAGGGGGTT CTTGGCAGAT GACGCCAGCA GCTGACAAAC AGGCAAGTGC AACTCGAG      418
```

(2) INFORMATION FOR SEQ ID NO:973:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 276 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:973:

GAATTCGGCC TTCATGGCCT AGATTGTAA AAGATTTTCC TAGATTTACT GTGTTCTGGA	60
TCTAGCTTGA ACGTGAATGT TTGTATAGTA CGTTTTCTTA ATATTTTTTA GTATTCATAG	120
TATATAATCA TACTAACTT GAGAACTGG AAGAATCAAG TCTTCCTCAG TTCTGTTTAG	180
ACTTTCTAGT TTTTTTTAAG GATACTTCCA TATCTTCTGT AAGCTACACA GTGAGCTTCA	240
TTTTTGCACA GTTATAATAC ACTCTCGAAT CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:974:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 379 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:974:

GAATTCGGCC TTCATGGCCT AGGGTTCGAT GATAAGCACA GGCGGCAGCT GGATTGCAAG	60
TGGAGTGGTA ATGGCCAGAA CAGCCTCTTT CTGTTTTGCA TTAGTCGAG GATCCAAGT	120
TTCATCCCAT TGTCTGTTAG GACTCCATGG TATGGTGGGA GTCATACTGA TGCTGGAAA	180
CAAAACCCCA TTGTCCTTGA TCCTGTCTAG TGCATAGTGC ATTTACAGA GGGGTAATCG	240
ATTTAATTGA AACTGAAGTT CAACCTGTGT GTCACAGTCA GGCCGAAGAT TAAGTTCTTC	300
ACAGCATTC CTAGATAGCC TTAATAATAT ATATTCCTTT GTTTTTTCTT CAATAGTAGC	360
TTCCTAGACC TGCCTCGAG	379

(2) INFORMATION FOR SEQ ID NO:975:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 417 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:975:

GAATTCGGCC TTCATGGCCT AAGAGAAAGA GAGTGAGAGA GAGAGAGAAA GAGAGAGAGA	60
GATGCTGTTG AATCAGAAAC AGATCAACAG CCCAAAGATT TTCCTGTCCC TGGAGTGCCA	120
GCCCCAGGAA GCTCCAGGGC TGAGTGGTCA GGAGCCAGTT TCTCCAGCCC CTCCTCCCA	180
CAACCCCTAG TGGGGAGGGG CAGCTGTCCA TTTGCCCAA GTATTAATGC AACTGAAGCT	240
GTGATATTC CAACGACTGT AGGAGGAAAA ATTAAGGGGA GAGAGGAAAA CAAAACCAAC	300
CAACCCCTAA AATCATTTTC TTATTGTACA TAACGACCTC ATTCTCCTGT ATATGCGGAA	360
GATATAACCT TATATTTGGT AAGTGTTTCT TGTGCTATTT TATCACGCGA CCTCGAG	417

(2) INFORMATION FOR SEQ ID NO:976:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 154 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:976:

GAATTCGGCC TTCATGGCCT ACACAGAAAA ATTTCAACAA TAAAAGTTCT TAATTATGGG	60
AAATAGTTAC ATGTGTGTTA TATCATTTAT GGCTCATTTT GTATTTTAT TAAAAGTAT	120
TAAAATCCCA ACAGTAACAG CAATACAACG CGAG	154

(2) INFORMATION FOR SEQ ID NO:977:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 252 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:977:

GAATTCGGCC TTCATGGCCT AAATTGTTCT TTGCTCAAAT AACTGTAA ATTTATCTTG	60
GCAGACTCTA TTTGATCCC CAAATTGAT TAGATTGG GCCATTAA TTTCACTATT	120
TAATAATAAC CCTACTGGAT GAGAATAAGT GTTCTCAAT TTCTGGTGAT ATGGTTTGGC	180
TGTGTCCCA CCCAGAATCT CATCTGAAT TATATCCCC ATAATCCCA CGTGTCAACG	240
GCAGGACTCG AG	252

(2) INFORMATION FOR SEQ ID NO:978:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 251 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:978:

GAATTCGGCC TTCATAGCCT AGTTAGTTC TCAGAATCT TCATATATT TGGCAGCAGT	60
TTTTCCATCA GATTATTTG TAAATATTT CTCCCAGTCT GTGACTTGCT TTTCCATTC	120
TCTTAACAGT GTCTTTCACA CAACAGAAGT TTTAATTTT AATGAGGCTC AACTTAATTT	180
TTTTTCATT AGTAGATTGT GCTTTGGTT TTGTATCTAA GAAGCCATCA TTGAACCCAG	240
GATCGCTCGA G	251

(2) INFORMATION FOR SEQ ID NO:979:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 534 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:979:

```

GAATTCGGCC TTCATGGCCT AGAAGGCTTC TGAATAATTT CTCAAAAC TA NCTTCCATT      60
TNAGTACACG ATTTGATAAA CATAGCACAT TAGATAGGTA TTTAGCAATT TCTTCTACCA      120
ACTACACTTT GCCCTCACTA AGGGTTAGAG TATGATTTGA AACAAATTTCT ACATATAAAG      180
CATCTTTAAA TAAGTTTGTG GTTCACTGAA CTGAGACTTC TTTCACTTAT GTACCTATGG      240
AAGTTAATCT GAGCATACAC ATATATACAT ACTTGCATAC ATATGTGTAC ATATGTTTTT      300
TAAGTAAGTN ACTTTTACCA TTAGAATAAA CCTAGACACT ACAGGGACAA CTCTGGGGAA      360
CAGGGCGGTC TGCCTTAACA ACCCTTCTCT AGGTTGAGGA AGGCAGGTAT AGTTCAGTGA      420
AGGATGTGAT GAGGCTGTAG TAAGTCTTCT CATCATCTGT TAATCCTGCG TTGCCTGGTC      480
TCACCACCAC AGCTACGTGC ACATCTGCTT CCTCAGCAGC ACTGGCCTCT CGAG          534

```

(2) INFORMATION FOR SEQ ID NO:980:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:980:

```

GCTCGAGTGT CGTGCTATCT CTAAATTGTG ATCACTAAGA ACCGCTGCGG AAACAGTAAC      60
TGTTTCTTTT ATTTTGTACA TTTAGTTTG TAATTATCC AATTCTTTCT TCTTTGATA      120
AGTCTCCATT CTCTTTACTT CACGGGTATT TTCAAATTCA TTAATCATTT TATCACAGTG      180
CCACTTGTTA GACCCTAATG AACGATGTCA CCCTCTTATC AAA          223

```

(2) INFORMATION FOR SEQ ID NO:981:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:981:

```

GAATTCGGCC TTCATGGCCT AATTACTTGA CCCGTAATAG GGTGTGGCC GTTTTCTGAT      60
GCCTAAGTAT TATACAGAGC CCACAATGGC CAGTTTACTA CCAGAAAGGG CTTCAGTAAG      120
ATATTCTTGG ACTTGATACT TTCTTCAGAT CCTCTTTGTG CCAAGATAAT TTATCCAGTC      180
ATTGGGAATA GTAAGTTTCT GTGTAACCCA TCTCAATTAT AGAAGCAAGT TCAGCTTTAT      240
GTATTTGTAT GGGGAGTTGA AGATTGAGAT AGAGGTATTA AGATGTGTGG CATTTACTTA      300
AACCATCACA TTTTCTTCTT TCTACGCCCC CTTGCCTGTA AAACACCTGG GAAGTTCAC      360
TGGTGTGATC CATCCTGATG CTTGAGACCA CCCTCCCTTC TTCACAGACC GTGTCACTTT      420
GCCTGTGGGT GGGGGCTAGC CAGCCACCAC CCTCTTTTCT GTGCTGCCAG CCAATCTCGA      480
G          481

```

(2) INFORMATION FOR SEQ ID NO:982:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:982:

TCCGTGTCCC CTCCTCCCTC TGCCCCCAGT GTTCTTCTG ATTTTTTTTT CCCCTTTCCC	60
TCCCTCCCTC TCCGCATTCT TCCCTTGGTT CAGCACAGGT AAAACGGTTC CCCTCCCTCC	120
CTGCCCTTCAT GGATCACCAG CTCACGTCAT GTTGCCTTCT CTTTCTTTG TGTGTGTGT	180
TATTTAAGTT ATTTTCTTC CTCCTCTCCC TTTTCTTTT GGCCCTCCCT CCCTCCCTCT	240
TCTGCCATGT AACTGGAGGA TGTGCTATGA GTTGCAAAC AGCCGGACTC GAG	293

(2) INFORMATION FOR SEQ ID NO:983:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 334 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:983:

GGTGAGGATG GTGGCTGTGG TTGTGTTGGT GGCTGTGATG GTGAAGGTGG CTGTGGTGGG	60
GATGGTGA CTGATGCTAA TGTGTTGTTGT GGTGATGGAG GCAGCTGTGG CAAGGATGGT	120
GACTTTGGTG GAGAAGGTGG CCATGTTGGG GCTAGTGGCT GTGGTTGTGG TGATGGCCAT	180
GGTGAGGATG GTGTAAAGG TGGCTGTGAT GAAGATGGTG ACTGGGGTAG AAATGGTGAC	240
TGTGATGGTA ATGTTGGCTG TGGTATGAA GGGTAGTTAT GGTGAGGATG ATGACTATGG	300
TGGTGAAGGG GCCATAGTGG CAACGGCACT CGAG	334

(2) INFORMATION FOR SEQ ID NO:984:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 631 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:984:

GAATTCGGCC TTCATGGCCT AGGGAAAGAG TAGGGGTGGA GGGGTAGGAG GATTTACTCT	60
TCCAGCGAGA GCTACGCGCA TCCCATCCTC CCCCTCCCCC CTACCCGGGC TCCGGCNTGG	120
AGGCGGGGCG TGGCCGGCCT GCTTTGGGAG GGGAGGGGCT TCCCTTACAG TGCTGGGCTC	180
TGCCAGGACG GCTGTGGGGT CGCCTTACCT CGGGGTATCC ACTCTGCAGT CGACCAGTTC	240
CCGCCAGGAG CAAAGGGTAG GAAGGAGAGC AGGATCTGCT GTAGGAACGC AGCTACCGCG	300
CCACTATCAC GAAGAAACAG CAGGCTCGGG GCACGAGACG AACTGGAGAC CGCGCTGCCT	360
AGCTGGGTAA CCTGGGAAGC AGAGGGTAAT AAGTGGCGCC TTAAGATAAC CCTGTAGCAG	420
CAGCAGTGGC GGCCAAAGGA GGCTGCTCAG GGAACAAGCG GCTGTAGTAG TCTGTGGGGC	480
GACTGGAGTG ACCGAAGCCA AGGCAGTTTA GTGCCTCTCG TGTCTTATT TTITAACCTC	540
TGACTATGCA ATTCTGAAAC CTCCCCATT CGGGGGACCA GACAGCCTGA TAGACACCTT	600
CCACTCTCCT TCCTCCCGCC GTGGTCTCGA G	631

(2) INFORMATION FOR SEQ ID NO:985:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 324 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:985:

GAATTCGGCC	AAAGAGGCCT	ACTGCCTCGG	TTTCTACCTT	TGCCAAATGA	GTTGATAGAT	60
TATCGCTTTT	TTCCAGCTG	TCATACTCTA	GGAGTCTGAA	TTGTAAAATC	AAAGAAGCAT	120
TTCCCAGAAA	AGTTTTTGTC	AAAAATTGTA	TTTACATAAC	CTCAGAAATG	TGTATTGCTT	180
TAAAAATTAT	AAAGTTCATG	GAGCATACCA	AGCAGCCTGT	ATACCATTTC	TAAACCAACT	240
ACTCCCCTGC	AAGATAGATC	TCTTTTAT	AGACAGAAAA	TAAATTCAAA	GAGGTTTGTT	300
ACTTGCCCAA	GGCCACCACT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:986:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:986:

GAATTCGGCT	TTCATGGCCT	AAAATGTTTT	TCAATTAAAG	ACTTAAATAT	TACACTTTTA	60
AAACTTTTTA	TTATGGAAAT	CTAAAAAAA	TTCACCAAAT	GAGAGAGAAC	ATTACAATGA	120
ACCACCACAT	ACCCATCACC	CATTTTCAAC	AATTATCAAC	ACATGGCCTA	TCTTGTTTCC	180
TCCATACCTT	CAGACACCCT	CCGTCCACAA	ACTGGGTTAT	TCTGAAGCAA	GCCTTCGAG	239

(2) INFORMATION FOR SEQ ID NO:987:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 695 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:987:

AAAAGTTCAG	GGACTTTGCA	CCCTGTGGGG	TACTCAGATG	TCCAGCCGCA	CTCTCTACAT	60
TAATAGTAGG	CAACTGGTGT	CCCTGCAGTG	GGGCCACCAG	GAAGTTCCGG	CCAACCTTAA	120
CTTGCTAGT	GATGTGTNGG	ATCACTGGGC	TGACATGGAG	AAGCTGGCAA	GNGACTCCNA	180
AGCCCACCCC	TGTGGTGGGT	GAATGGGAAA	GGGAAAGAAT	TAATGTGGAA	TTTCAGAGAA	240
CTGAGTGAAA	ACAGCCAGCA	NGCAGCCAAC	TTCCTCTCGG	GAGCCTGTGG	CTTGACGCGT	300
GGGGATCGTG	TGGCAGTGAT	GCTGCCCNCA	ANGCCTGAGT	GGTGGCTGGN	GATCCTGGGC	360
TGCATTCGAG	CAGGTCTCAT	CTTTATGCCT	GGAACCATCC	AGATGAAATC	CACAGACATA	420
CTGTATAGGT	TGCAGATGTC	TAAGGCCAAG	GCTATTGTTG	CTGGGGATGA	AGTCATCCAA	480
GAAGTGGACA	CAGTGGCATC	TGAATGTCCT	TCTCTGAGAA	TTAAGCTACT	GGTGTCTGAG	540
AAAAGCTGCG	ATGGGTGGCT	GAACCTCAAG	AAACTACTAA	ATGAGGCATC	CACCACTCAT	600
CACTGTGTGG	AGACTGGAAG	CCAGGAAGCA	TCTGCCATCT	ACTTCACTAG	TGGGACCAGT	660
GGTCTTCCCA	AGATGGCAGA	ACATTCCTAC	TCGAG			695

(2) INFORMATION FOR SEQ ID NO:988:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:988:

GAATTCGGCC	TTCATGGCCT	ACTCAGAACA	ATCACTGCAT	ATCCCATCTT	AAAGGCAAAA	60
CCCAAACCAG	AAAAACCCCA	CTCAGGTCTT	GCTGACCCAA	CACTACAGTC	ACTGTATTTG	120
AGACCCCTTT	TTCTTGAAAA	AGGGACTTCA	CTTTTTTGAG	CAGCATTCTA	TGGTTCTTTC	180
CACACAGCAA	TTGACGCATC	TCACGGCACT	GCTCTCTGCT	GGGCAGAGAG	CAACACAGA	240
CAGCCACCAT	CCCCATATTC	GTAAGTAAGAG	AAACTCCAGA	AACGCAGCCA	CCGTCCCCCT	300
AGACCTGCCT	CGAG					314

(2) INFORMATION FOR SEQ ID NO:989:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 687 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:989:

GAATTCGGCC	AAAGAGGCCT	AGGAGCTCCC	CCATGGATCA	TGGCGTTAAT	GTTTACAGGA	60
CATTACTAT	TCTTAGCATT	ATTGATGTTT	GCTTCTCTTA	CTTTTGAGGA	ATCTGTGAGC	120
AATTATTCCG	AATGGGCAGT	TTTCACAGAT	GATATAGATC	AGTTTAAAAC	ACAGAAAGTG	180
CAAGATTTCA	GACCCAACCA	AAAGCTGAAG	AAAAGTATGC	TTCATCCAAG	TTTATATTTT	240
GATGCTGGAG	AAATCCAAGC	AATGAGACAA	AAGTCTCGTG	CAAGCCATTT	GCATCTTTTT	300
AGAGCTATCA	GAAGTGCAGT	GACAGTTATG	CTGTCCAACC	CAACATACTA	CCTACCTCCA	360
CCAAAGCATG	CTGATTTTGC	TGCCAAGTGG	AATGAAATTT	ATGGTAACAA	TCTGCCTCCT	420
TTAGCATGT	ACTGTTTGT	ATGCCCAGAA	GACAAAGTTG	CCTTTGAATT	TGTCTTGGAA	480
TATATGGACA	GGATGGTTGG	CTACAAAGAC	TGGCTAGTAG	AGAATGCACC	AGGAGATGAG	540
GTTCCAATG	GCCATTCCCT	AACAGGTTTT	GCCACTGCCT	TTGACTTTTT	ATATAACTTA	600
TTAGATAATC	ATCGAAGACA	AAAATACCTG	GAAAAAATAT	GGGTTATTAC	TGAGGAAATG	660
TACGAGTATT	CCATGGTCCG	TCTCGAG				687

(2) INFORMATION FOR SEQ ID NO:990:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 677 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:990:

GAATTCGGCC	AAAGAAGGCC	TAGAGCCCTT	CTGTCCCCTC	TACCATGTGT	GGATGCAGTG	60
AGAAGGCACC	GTATCTCTGA	AGCAGAGAGC	CGGCCCTGGA	CACTGGATCT	GCTGGCACCT	120
TGATCTTGGA	CTTCCAGGCC	TCTAGAAGTG	TGAGAAATAA	TTTTTTGTTG	TTTACAAATT	180
ACCCAGGCTA	AGGTGTTTCA	TTGTAACCTG	AATGGACCAA	GCTGGTGTA	CCCTGTTGGA	240
AAACTGGCAG	TATCTACCAA	AAGCCGAACA	TACGTATAAA	CTGATCCAGC	AGTTCCACTC	300
CTGGGTATGT	ACACCACAGA	AAGCTATGTC	CACCGAGACA	TTGGCAAGAA	TGTTTCTAAC	360
CACAGCTGA	CTGTAGCCCC	AAACCTGAAA	CAACCCAAAT	GTCCATCCAC	CAACCCAAAT	420
GTCCATCCAC	AGTTGAAGCT	ACAGTGAAGT	CACAGGGTCG	AATACTACTG	CACAGCAACG	480
AATATGAATG	AAAATATCGC	TATGCACAGC	AACATGGATA	AATTTACAG	ACATGAGGTC	540
AAGCAAAAAG	GGTCAGAGTC	CTCATCATCA	AGAGAGAATT	CATTGTATGA	TTCTCTTCCT	600
ACAAAAAGTA	CAGAAATAAG	CAAACTGAT	CCATGGTGTT	AGAAGCCAGG	GGAACAGTTA	660

ACAAGGGAGC ACTCGAG

677

(2) INFORMATION FOR SEQ ID NO:991:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 445 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:991:

```

GAATTCGGCC AAAGAGGCCT AAGAAGCTGC TTCCTCCTGG GAACAACCGC CTCCCGCTCC      60
TAGCAGGTTG CTACTGCCCC GAACCCGCGC TGCAGGGAAC AGCGGGGCAA ACAAACCAA      120
TAGAGCCATG GCGACTCCCT CTGCTGCCTT CGAGGCCCTT ATGAATGGTG TGACAAGCTG      180
GGATGTACCC GAAGATGCTG TTCCATGTGA ACTGCTTCTT ATTGGAGAGG CTTCAATTCC      240
TGTGATGGTG AATGACATGG GCCAGGTCCT CATTGCTGCC TCCTCCTATG GCCGTGGCCG      300
CCTGGTGGTC GTGTCCCATG AGGACTACTT GGTGGAAGCC CAGCTCACGC CCTTCTCCT      360
GAACGCAGTG GGGTGGCTTT GCTCTTCCCC TGGGGCTCCC ATTGGGTGTAC ACCCATCCCT      420
GGCACCTTTG GCCAAATCC TCGAG                                         445

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(2) INFORMATION FOR SEQ ID NO:992:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 392 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:992:

```

GAATTCGGCC TTCATGGCCT ACTGTGATTT AAAATCTTGC TGTGTGGCTT GGGTGTGTTG      60
TGTGGTTCC AAACCTGAA TCTTTGGGG TCTTCAATTT GTGGGCATGT CAGTGGAAAT      120
TCTAAGCTTT GTTAAATGGT GTGTGTGTGT CTGTCTGTCT CTGTGTGAGT GTGTTAGAA      180
ATTGGCTTCT CTGGGTTTCT CGCTCGTCTT CTGGAAGGTG GGGTTATAGA CATGCTGGTG      240
AATTCTGAAT GTTTTATAAA TTAGACTATT AACGGAGTTA AATTGAAGAA ACCTTCTGTC      300
ATAAGACCTT CCAGGAATTC CATTCCAAAT GAGGAAATGC ATAAAGACTT GTCCACTTGG      360
CAAACATTGG GTGTTTGGGA GGTGGACTCG AG                                         392

```

(2) INFORMATION FOR SEQ ID NO:993:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 359 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:993:

```

GAATTCGGCC TTCATGGCCT AGGCGGCTCC CTTGGTCCTG GTGCTGGTGG TGGCTGTGAC      60
AGTGCGGGCG GCCTTGTTCC GCTCCAGTCT GGCCGAGTTC ATTTCCGAGC GGGTGGAGGT      120
GGTGTCCCA CTGAGCTCTT GGAAGAGAGT GGTGAAGGC CTTTCACTGT TGGACTGGG      180
AGTATCTCCG TATTCTGGAG CAGTATTTCA TGAACTCCA TTAATAATAT ACCTCTTTCA      240

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TTTCCTAATT GACTATGCTG AATTGGTGTT TATGATAACT GATGCACTCA CTGCTATTGC 300
CCTTTGATTTT GCAATCCAGG ACTTCAATAA AGTTGTGTTT AAAAAGCAGA AACCTCGAG 359

(2) INFORMATION FOR SEQ ID NO:994:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:994:

GAATTCGGCC AAAGAGGCCT AGACTGTCAG CTGTGAGTGG CCAGTACAAC AAATGCTTTG 60
GCTTTCAGTT GTCATTCTGA TGTCTTGCAA CATATCATCG TGTTCGATTC TCGAG 115

(2) INFORMATION FOR SEQ ID NO:995:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:995:

GAATTCGGCC AAAGAGGCCT AGTGGAGACA AAAGCATGTG ATCCCAATTT GCTGGGATAT 60
CCTCTCCTGC ATTTCAAACA CCTTCACTCA GTGTCAGCCA CAGCGGCCAC CACATAGCAG 120
CTGGCCCCGC ACCTTCTCTG GAACAGTCTG GAGATGCAAG GTCAGGGTGG AAGGCCTGGT 180
TCACCCCTGA AAGAAAGGAT GGCTAGGGGT AAACAAGACG AGCAACTCCC TGGAAATGCAG 240
GGAGCCAAGA AGGGCAGCCG AGGATAAGGC TCTGCCTCCC CAACGGCGAG GGTTCCTTT 300
CCTTCTGGTC ATTANAAGT CACAGCCCCC GGGGAGATGT TGAACATGGC AGGGTCGAAT 360
CGCTGGCCTC GGAAGGGAGA ACTTCAGCAT CCCACCCTTC TTCAGCATCT CATGGACTTT 420
CAGCTCATGG CTCTGTGGCT TGCCCTGCAG CTCTGGTGG TAGTCAAAGG TAAGCCTGTC 480
CAACACCGCC TGTTCTCCT CATCCACGGT GGCCATGGAG CGCTCCTGT TGATCTTGTC 540
AATGTCGATG GGCTCTTCTC CCTCCAGGAT GGCCTTCCAC CAATACTCGC CCACCTTGCT 600
CAGGTTCAAC AAAAGCACT TCCGGGCTC GAG 633

(2) INFORMATION FOR SEQ ID NO:996:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:996:

GAATTCGGCC AAAGAGGCCT AGTTGATTCT CAGTTCATGG TGGAGTCATT CAAGTTTATT 60
TCTGGCATCT TGGCAGCCCT GAGTGCCATG ATCTCTCTAG AAATTCCGCA AGTCAACATC 120
ATGACAAAAA TGGATCTGCT GAGTAAAAAA GCAAAAAAGG AAATTGAGAA ATTTTATGAT 180
CCAGACATGT ATTCTTTATT AGAAGATTCT ACAAGTACT TAAGAAGCAA AAAATTCAAG 240
AAACTGACTA AAGCTATATG TGGACTGATT GATGACTACA GCATGGTTCG ATTTTACCT 300

TACGATCAGT CAGATGAAGA AAGCATGAAC ATTGTATTGC AGCATATTGA TTTTGCCATT 360
 CAATATGGAG AAGACCTAGA ATTTAAAGAA CCAAAGGAAC GTGAAGATGA GTCTTCCTCT 420
 ATGTTTGACG AATATTTTCA AGAATGCCAG GATGTACTCG AG 462

(2) INFORMATION FOR SEQ ID NO:997:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:997:

GAATTCGGCC AAAGAGGCCT AGCTGGTAAC ACATGTGAAC TCAGGTAAAG TCATCGAGCA 60
 TTTTACTGAC TCTATTCCTC AATAAAGTAC TGGGAAAAAA CTCATAAGAA TGACAAAAAC 120
 AACATACTCA GGTATGCGAG CAGAAGCCTC TGACACAGCT TGTCTTCGGG GCTTAACTAA 180
 ATGATCTATT TTAATGAGGG AATCCGTGGA AAGGCATGCG TTTTCAGGCT CATTTCCTGC 240
 TTCGATGCTT TGTCCAGAGA GTTGGAACTC CAACGTGTGT TTCATGTGAG GCTCCTTAAG 300
 AGGGTGACAT TCAACATCCC AAAACTGGGC ATAATCCCCC CTACCTCTGG GCAAAAATGT 360
 GATGGAGACT TTTTGGATCC CATGGCTTTC CAGCAGACCA GAAATAGGAG AACATCTGAA 420
 TGCTGCATAG GTAGCTCTAA AAACATCTCC ACTTTCATCA ACTCCCTTGA CATAAGGTGG 480
 CACCACAGAC GTGAAATGGC ATCTGTCATC TTTAGCGCCA CCTTATGTCA AGGGAGTTGA 540
 TTCTCGAG 548

(2) INFORMATION FOR SEQ ID NO:998:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:998:

GAATTCGGCC AAAGAGGCCT AGTTTCCCTT TCTGTATTTT ACTACTAAAT TAGAAAGCAC 60
 TGGTTATGTA ATAAGTTACT ACATTGCTTT GGTGAGTAA AAACAAGAGT ATATATTTTT 120
 CTTGTTTCTT ATTTNCTAAA CCCTTAACTC CTGCTGAGGT CATAACAACC TCAGTCTAAG 180
 CTCTGTGTCC ATCATACTGT TAACTTAAAC AAATGGGTGG TGGGGGTGGG AAGGGTAATA 240
 CAGTCCCTGCC ATTGCCTACC AGTAGGAGAG TCCAAACAGA ACACTCTTTT GAGTAGCAAT 300
 TATTTAATTT GCCCAGTCAA GGCACCGTGT TTATATACTA TTTCACATTG AATTTGATTA 360
 TGCCCTACAG ACCTGGCTGG TCAAGGATTT GATATACACA TATTGGCTTG GGATTGAGC 420
 TTTCTTTTTT ATTTAAATAA AAATTTATAT ATATATTATA TATATACATA TATACATAGC 480
 TATATCTGTA TATATATTGG GTATGTTTTA AGGATTTTTT CGCATGAGCG CAGCTGTTGC 540
 GATAAATTGA CCGATTGGGA GGTATTCTCG AG 572

(2) INFORMATION FOR SEQ ID NO:999:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 629 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:999:

GAATTCGGCC	AAAGAGGCCT	AGAGGGGAGC	ACGTCTTTTC	CTTGAGTGTA	ATTTACTAAT	60
GACTGTGGTT	CCAAGGAGGT	GCGACCTTTA	AAGGGAATTG	GCCCTTCTTT	GAAGGCAGGT	120
GAGAACTCTAG	TCTCAGTGAC	AACCCAGCCT	GATTTGGAAG	GGGGGAGTCA	TAAGGGTTTT	180
CGCCACGAC	ACCAGGGTTG	CAGCCTGCGC	AAGACCTTCC	ATAGCTATTT	CTGCCGGCTT	240
GCTTCCTTCC	CTTCCCAGCC	ACGATGAGGC	AGCTGAGGGT	TGCCACGGAA	ACCGGCTCTG	300
TCCTCCCACT	GGAGGCTGCC	AGCTCTGATT	TCCTGCAGAG	TTAAGAAGGA	GGCGGCAGTG	360
GGGGTCACCC	AGGCGTGAAG	ATGGGTTTCC	CTGGGGATAT	CCTGCCTCCT	GCCAATCACA	420
GCGTCTCTCT	GGGAATCCTG	GGGTGCTCTG	GAGGCTGAGG	CCCAGGGAAG	CCCCCAAACC	480
CCAGTGCTGC	TCTGAGAAGA	GACTAGCCTC	TGGGACATTC	AGAGGTCTGG	GGTTCTTTTA	540
TCTCCCTCCA	GCTAAAGCTA	GAGGGACCTC	ATTATGTGTC	TTACAAGATG	TACCCTAAAC	600
CGTCGATTGA	ATTCTAGACC	CGCCTCGAG				629

(2) INFORMATION FOR SEQ ID NO:1000:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 568 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1000:

GAATTCGGCC	AAAGAGGCCT	ACCTGTATGC	TATTAACACT	CACCACAGCA	GAGAGCTGAG	60
GATTGTGGTT	GCAATTCGGA	ATAAACTGCT	TCTGATCACA	AGAAAACACA	ACAAGCCAAG	120
CGGGGTCACC	AGCACCTCAT	TGTATCTCC	CCTGTCTGAG	TCACCTGTTG	AAGAATTCCA	180
GTACATCAGG	GAGATCTGTC	TGTCTGACTC	TCCCATGGTG	ANGACCTTAG	TGGATGGGCC	240
AGCTGAAGAG	AGTGACAATC	TCATCTGTGT	GGCTTATCGA	CACCAATTTG	ATGTGGTGAA	300
TGAGAGCACCA	GGAGAAGCCT	TCAGGCTGCA	CCACGTGGAG	GCCAACAGGG	TTAATTTTGT	360
TGCAGCTATT	GATGTGTACG	AAGATGGAGA	AGCTGGTTTG	CTGTTGTGTT	ACAACCTACAG	420
TTGCATCTAT	AAAAAGGTTT	GCCCCTTTAA	TGGTGGCTCT	TTTTTGGTTC	AACCTTCTGC	480
GTCAGATTTC	CAGTTCTGTT	GGAACCAGGC	TCCCTATGCA	ATTGTCTGTG	CTTTCCCGTA	540
TCTCCTGGCC	TTCACCACCG	AATCGAG				568

(2) INFORMATION FOR SEQ ID NO:1001:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 543 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1001:

GAATTCGGCC	AAAGAGGCCT	AGTAATACTT	AAAGTGCAAT	TGTTCCAAGG	CTTTTGTTC	60
CATCATCACA	AATATTATAA	AGAAAGAGCT	ATGTTTAGGG	TGAAGAAGAT	ATGGCACAAAG	120
TAATATGTAA	AGAACTTATG	ACTTTCGCAT	CCTCTAGCAA	ACAGTAAGCT	GCCTGTACAG	180
CTGCACACAG	ACGGACTTTA	CACAACAAAC	TCTGGAACCT	CATCATGAGT	GAGATCCAGA	240
GAAAAGTATT	TGCTGGTTCT	TTTGACTGGA	AAAGCATCTT	GGATGTTGAT	GCACTGCTGG	300
GCCAAGCAAC	TGTTGCAATA	GAGGCCTTCC	TCATCCAGTT	CATGGCCACA	TCCAAAGGTG	360
TAACCTGAG	CAGTGTCTCTG	ACACAGACCT	GCAATGCGCA	GGAAGTCTTT	CTGGTAAAGT	420
CTGATGTCAT	CGAGGCTCAA	GCTGTGTCGA	TCAGTGGAGG	TCCTTGGTTT	CCGACATATA	480
GTCTGTGGAA	GAGAATCAGT	ACTCTGGCCA	CGAAGCTTAA	CAACTGTTTC	TGAAGAGCTC	540
GAG						543

(2) INFORMATION FOR SEQ ID NO:1002:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1002:

```

GAATTCGGCC AAAGAGGCCT AATTCCACTT ACGAATTAAC ACTGTGTACA TGGCACCTTT      60
GGGCCCCATCT TGCCTTGAAA GTCCCTGTTG GATGGAACAG TGGCATT TTCCTTTTC      120
TCAGGACTGC AAACAGACCT AATATTGGC CTTGCCCTTG CCTGGGAAGC TGCTGCTGAG      180
TCTGTCTCA GCCGGGCTGT GCATTCCGAG CGGCTGCCCT GCCCTGCGCT CAGCAGCTGG      240
AATCAATCTG CCCACCTCCT TAAGAAGCCA CTTTCATCAGC GGTCACCCGG CAGCTGCTCG      300
CCTCCCAGGG CTGCCGGGCT AGGGCTTTAT CGCATTTTTC AAAATTTCAGA TTTCTGTGTC      360
TGGGCTATGC CCCTCGAACA GTAACAGCAC CGCTTTGCAG CAGGGAGGAG ATTTCAACCAG      420
GATATGGAGG GGACAGGAGA AAAGCCCTCC TTCCCAGAGT CCACTGTTCAT TCAGGATTTC      480
CTCTCAAAGA GGCAAGAAAT CTCTAAGAAAT GAAAGGAGGT GTTTTGTTGT TGTGTGTTGT      540
TTTTGTATGT ACTGGGAGGA AATGGCTAAT CTTGGGTATG CACACGCTCG AG              592

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(2) INFORMATION FOR SEQ ID NO:1003:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1003:

```

GAATTCGGCC AAAGAGGCCT AGGCTCCGTC TGGTGGGGGG CGAACACGCC GCGGTCCTCG      60
TCGTGTGAAG TAAGAACTCT GCTAGAGAGG AAATGGCTGC TTCATCATCA TCCTCCTCAG      120
CTGGTGGGGT CAGTGGAAGT TCTGTCACTG GATCTGGTTT CAGTGTCTCA GACCTTGCCC      180
CACCACGGAA AGCCCTTTTC ACCTACCCCA AAGGAGCTGG AGAGATGTTA GAAGATGGCT      240
CTGAGAGATC NTCTGCGAAT CTGTTTTTAG CTATCAAGTG GCATCCACGC TTAAACAGGT      300
GAAACATGAT CAGCAAGTTG CTCGGATGGA AAAACTAGCT GGTTTGGTAG AAGAGCTGGA      360
GGCTGACGAG TGGCGGTTTA AGCCCATCGA GCAGCTGCTG GGATTCACCC CCTCTTCAGG      420
TTGATACTGC CTGGATGGTC ACCTCTGGTG CGCAGCAAGT GCAAAGCCAG TGGGGGACTT      480
TCTCACAGCT TACATAGCCA TCCAGAGATC CACAGCTACG TCACTGAATT GTTAATGCAC      540
ATTTGTACTT GGTTCCTCTG TATCTATTCA CAGGCGAACT CGAG              584

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(2) INFORMATION FOR SEQ ID NO:1004:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 440 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1004:

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GAATTCGGCC TTCATGGCCT ACTTTCTCAT TCCCTAAGTC ATTAGAAAGC ACCAGTTCTA      60

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ACTCCAAATG	ATGACATGGT	CTTATTTTAT	CTATTAACCA	TAAGCTTACA	GATTCTAGTG	120
AAGAAAAAAC	TTTAGGAGGC	TACATGGTCT	ATTGGAGAGT	GTAGGCTCTG	CAGTCAGAAG	180
ATCCCTACCC	AGGCTTCTGT	CTTTCTCAGT	AAGACTTGGG	ACCACAGCAA	GGTCCGCAAT	240
CTCCTGAGGC	TCTGTTTTCT	ATGGTTGGGA	TAACATGGTA	AGTTATTTTC	TTCTAAGTAG	300
TCACACATGG	AAATCTTATC	TAAAATTTTA	TACCATTAAC	TTTTATTTCA	CTTATTAAC	360
CATACCATT	ATACTTTACT	TTAGCTATGT	TTGGTATGCA	TGAGTTGATG	AGTGATTAGA	420
GTACTATGAG	CGATCTCGAG					440

(2) INFORMATION FOR SEQ ID NO:1005:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1005:

GAATTCGGCC	TTCATGGCCT	ACTCAGTTGC	AGATTCTGGC	CAACATGGAC	AGCCAGCTAA	60
AAGAGCTACA	GAGTCAGCAT	ACCCATTGTG	CCCAGGACCT	GGCTATGAAG	GATGAGTTAC	120
TCTGCCAGCT	TACCCAGAGC	AATGAGGAGC	AGGCTGCTCA	ATGGCAAAAG	GAAGAGATGG	180
CACTAAAACA	CATGCAGGCA	GAAGTGCAGC	AGCAACAAGC	TGTCCTGGCC	AAAGAGGTGC	240
GGGACCTGAA	AGAGACCTTG	GAGTTTGAG	ACCAGGAGAA	TCAGGTTGCT	CACCTGGAGC	300
TGGGTCAGGT	TGAGTGTCAA	TTGAAAACCA	CACTGGAAGT	GCTCCGGGAG	CGCAGCTTGC	360
AGTGTGAGAA	CCTCAAGGAC	ACTGTAGAGA	ACCTAACGGC	TAAACTGGCC	AGCACCATAG	420
CTCGAG						426

(2) INFORMATION FOR SEQ ID NO:1006:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1006:

GAATTCGGCC	TTCATGGCCT	AGAGTAGCCA	GGGAGCTGGA	AGTTCACAG	ATTGGTTTTA	60
ATAAACAAAC	TCCCTCAATG	ATGAGTGGTC	TTTTGAAGAG	CATGGTTAGA	ACTTGGGATT	120
GTGCTTCTCA	TGACTACAAA	TGTACTTGTA	GCTTAGGTGC	AAAAGGGTAG	GTCAGTGGGT	180
AGCTAACTAC	TGAGGATTGA	TTTTCTGAC	GCTGGTGTTT	AAGTGTCACC	CAGAACTGGC	240
ATATAAAGTG	GCTCATTCAC	CCAAGTATCT	TCCTTTCCTT	TTTACAAAAT	CCTTGGCTGT	300
TGTGGGGCCT	ACATCTCTTC	ATGATTATTA	TTGCATCTGG	TGTCATGTTT	TTCCAGCTGG	360
TGTACTGCTT	CCCTGTAGGC	TTCTTGATGT	TCACTCCTCG	AG		402

(2) INFORMATION FOR SEQ ID NO:1007:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1007:

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GAATTCGGCC TTCATGGCCT ACTGGTGCCA CGGGAGGCAG ACACCAAGTT CTGGGGTCTC      60
CAGCTGCAGT GGGTGGCCGC CAATTGCTTC TCTCTGTCCA GACTAATGAG AACATGGAGA      120
TCACCAGTGC ACTGCAGTTG GAATAGCACG TAAAGAGGGA GCTGGGAAAG AAGCTGGGCA      180
AGCTAAAGGA CATGGTAACC CTGCCCCATC CAAGAAGAGC TGGAAGGCCG GCACCAGCCT      240
CTGGGGAGGG GAGGTGTGAA GCCAGAGGCA GCTCCAGCCT GGGGGACAGG TGACCCACGC      300
ACCCCTCCAGG GCAGTCTGTG GACTGTTTCT TGCTTCCCGC CCTCTGACAT TTAGTGGTGG      360
GTTCTGTCTT CCTAGGTCTG GACATCATCA TCCAGCTGG AGTCATGGAG CCTCCCAAAC      420
ATAGGGAAG AGATGGTGGT ATAAGAGGCT CTCGAG                                456

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(2) INFORMATION FOR SEQ ID NO:1008:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 564 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1008:

```

GAATTCGGCC AAAGAGGCCT AGGATGGCTG TGTTTGACGG GTGTTGCTCG TGACAGTTGG      60
GGTCCTCCTC AGCATCAGTC TTGACATGGC TGCAACTGGG GGGGTCCCTG GGATCCTCCC      120
GGAATCTCTT CCTCAGCATT CGCTCATGAT AAGGTTTCAG GTGTCTTGAT GGTTCACTCC      180
TGGAGAAACA TAAGCATAAC CTCTACCCCA AGTTATTATT TTACCTATTT CCCAACTTTC      240
TGTTATCAGG TCTCTCCACC AAACCAGTTG TTCTGCTTCT GTCTTTGCAG CTGGTTTCTG      300
TAGATGCTGT TCAGCTGCTG ATAAGATCCG GCCTTTAGGC AGGCTCAAAA AATTTAAAGT      360
TAATAATGCG ATTCAATTGC TTATGGGGTG TCCTGTAGTA CCTGTTTTCC CCCTTTTGCT      420
TCTGCAACTG CTGTTTCAGG GAGAGATTCA TTCTTTCCAC TATGGCNTGT CCTTCAGAAT      480
TATATGGGAT ATCAGTAATG TGTTTAATAT TCCGTATAGA GAAAAATTTA GCTAGAGCTT      540
GAGAATTAGG TTCCAATCCT CGAG                                564

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(2) INFORMATION FOR SEQ ID NO:1009:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 661 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1009:

```

GAATTCGGCC AAAGAGGCCT AGAAAAAGAT GTCATTCCGT AAAGTAAACA TCATCATCTT      60
GGTCCTGGCT GTTGCTCTCT TCTTACTGGT TTTGCACCAT AACTTCCTCA GCTTGAGCAG      120
TTTGTTAAGG AATGAGGTTA CAGATTCAGG AATTGTAGGG CCTCAACCTA TAGACTTTGT      180
CCCAATGCT CTCCGACATG CAGTAGATGG GAGACAAGAG GAGATTCCTG TGTCATCGC      240
TGCATCTGAA GACAGGCTTG GGGGGGCCAT TGCAGCTATA AACAGCATTC AGCACAACAC      300
TCGCTCCAAT GTGATTTTCT ACATTGTTAC TCTCAACAAT ACAGCAGACC ATCTCCGGTC      360
CTGGCTCAAC AGTGATTCCC TGAAAAGCAT CAGATACAAA ATTGTCAATT TTGACCCTAA      420
ACTTTTGGA GAAAAGTAA AGGAGGATCC TGACCAGGGG GAATCCATGA AACCTTTAAC      480
CTTTGCAAGG TTCTACTTGC CAATTCTGGT TCCAGCGCA AAGAAGGCCA TATACATGGA      540
TGATGATGTA ATTGTGCAAG GTGATATTCT TGCCCTTTAC AATACAGCAC TGAAGCCAGG      600
ACATGCAGCT GCATTTTCAG AAGATTGTGA TTCAGCCTCT ACTAAAGTTG TCGATCTCGA      660
G                                661

```

(2) INFORMATION FOR SEQ ID NO:1010:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1010:

```

GAATTCGGCC TTCATGGCCT AGGAAAGATT TGA CTGCTTC TCTCATGCAG GGAATAAAG      60
CAAAGGCACG TGCAGAGGGA AGTAGGGGTA GAGAGAGGCA AGTTAGCTTC AGAGACATTT      120
ATTTGCACCC AGTTCTGTTC TACTCAGCCT GACGTTTAT CATCTTTTG AAAAGTGGCG      180
TGAAGTGGTG TGGAACACAT CAGAGGGTGA AGCCGAGCAA ATCTGAAAGA GAGCAGAGGA      240
TTTCATATGA TATCCTATGT GTGCTTTCCC CTTCCTTCTT AGGAGCTGGA AGAGGCAGAA      300
TTGATGTCCA CTCGAG                                     316

```

(2) INFORMATION FOR SEQ ID NO:1011:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1011:

```

GAATTCGGCC TTCATGGCCT AGAAACATGC TAGACATTTT GAAGAACCAG CAAGAATGTT      60
AGTGTAGCCA ACAGTGAGGC AGGCAAAGGT GAGTAAGGTA GATTAGTTCA GGAAGAAAAA      120
CATAACATTA TTTAATCCAT TGTGGGCCAC ATTGCACTAT GATAACACTA TCATGTCATA      180
GAGTCTCACC ATTGTTTAAAG ATGTTTAAAT TTTTAAATAC GAATATATTC TCACACCCCT      240
CGAG                                     244

```

(2) INFORMATION FOR SEQ ID NO:1012:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1012:

```

GAATTCGGCC TTCATGGCCT AGCACTTCCC GAGACTCTCT AGCCTTGGAT AAAGAGAGAA      60
TGGATAAAGA TCTGGGATCT GTGCAGGGAT TTGAAGATAC AAATAAATCC GAGAGAACTG      120
AGAGTCTGGA AGGAGATGAC GAGTCCAAGT TAGATGATGC ACATTCATTA GGCTCTGGTG      180
CTGGAGAAGG ATACGAGCCA ATCAGTGATG ACGAACTAGA TGAAATTCTG GCAGGTGATG      240
CAGAAAAGAG GGAGGACCAA CAGGATGAGG AGAAGATGCC AGATCCCTTA GATGTGATAG      300
ATGTGGATTG GTCTGGTCTT ATGCCAAAGC ATCCAAAAGA ACAACGAGGC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:1013:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1013:

GAATTCGGCC	TTCATGGCCT	ACAGCCTAAA	TGTTTTATTT	CCTGAGAGGC	TGGAATCTGT	60
ATTTGTGGTA	TCAATCAGTC	AACTGAAATT	TATTAAATGC	CTGCTGTGAG	CAAGGCCTAA	120
TGCTGAGGGA	TGTAAAGAAG	AGTGAGAAGC	TAGTCTGGTT	GGGGTNATAT	GACATGGCAA	180
GTCATAGAA	TGAAGAAGCGT	ATTCCTTGTC	ATATGAAAGC	TGCAGATTAG	TGTGGTTCTA	240
AGTAGAGGCC	AGGGTCACTG	GAGTCTAGGA	TTGCAGGGTT	GGCTGGCTTC	CCAGAGGCTA	300
AGAATTTAAT	TTGGATCTTG	AAGATCTGGT	CCAATTCCAA	CANGACTCGA	G	351

(2) INFORMATION FOR SEQ ID NO:1014:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 393 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1014:

GAATTCGGCC	TTCATGGCCT	AGGCCTTGTA	TTTTTCTTA	TTTTCTGCTA	AATTAGAAAG	60
AAATTTGCTG	TTTCAAATAT	ACTCAAGCTG	TTCAGTCTTT	CAACAAAAAG	TAGGTGACTG	120
AAACTGTAT	GTTAACTAT	GCTTAAGTTA	ATATTTATAG	TAATGATAGA	AGCCATTTTA	180
TTGGCAATAT	ATCACTTCCT	GATTTCCACA	CCAGGCATTC	CCACATGCAC	AAACAGGTGT	240
GTGGGAGGAA	GGGAAATGGG	CAAAAATGAT	TTCTTCAAG	AGGCTACTGA	GAATGAAAAAC	300
TCAAATCTG	CACAAATAGG	GGTGGTGAA	GGAGAGAAAG	AAAACTCCAT	GCCAGAAATA	360
ACATGCTTAG	CAGAGAGAGA	GAGAGATCTC	GAG			393

(2) INFORMATION FOR SEQ ID NO:1015:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 262 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1015:

GAATTCGGCC	TTCATGGCCT	AACTCAGTTG	GCTTCTAATT	TGCGTAACAA	GATTAAGGTA	60
GTATTTTGT	ACTATTATTG	GAAGCATGCC	TTCCCTTTT	CACATTATTA	AATTGTATTT	120
ATATTTGTGC	AATTTTAAAC	TATGTTTCA	AATAAACTTT	GTCTGCGGCT	TCGAGGTCTT	180
TTCAGGAATC	TTTCAAAATG	GGATTGGGG	ATCAGAACTC	CTTCTGATCA	AATGGAATCC	240
AATTGTACT	ACTGGTCTCG	AG				262

(2) INFORMATION FOR SEQ ID NO:1016:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 304 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1016:

CAGAATGGGA CTCCAAGCCT GNCTCCTAGG GCTCTTTGCC CTCATCCTCT CTGGCAAATG	60
CAGTTACAGC CCGGAGCCCG ACCAGCGGAG GACGCTGCCC CCAGGCTGGG TGTCCCTGGG	120
CCGTGCGGAC CCTGAGGAAG AGCTGAGTCT CACCTTTGCC CTGAGACAGC AGAATGTGGA	180
AAGACTCTCG GAGCTGGTGC AGGCTGTGTC GGATCCCAGC TCTCCTCAAT ACGGAAAATA	240
CCTGACCCTA GAGAATGTGG CTGATCTGGT GAGGCCATCC CCACTGACCC TCCACACGCT	300
CGAG	304

(2) INFORMATION FOR SEQ ID NO:1017:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1017:

GAATTCGGCC AAAGAGGCCT AGTTTAAAGA AAAAAAAAAA GACCCATCAA GGGCATAGAA	60
AAGCTTAGGT GAAGAAACCC TAAATGAAT CCTCATTTAT CAACTCATTC ATTTATTGAT	120
TCATTGTTC ATTCAATTGT TCACTCAAGA AGTATTTGTT GCCAGACACA GTACCAACAA	180
AGAAAATAAG CATCCACTAC GGCTTTGCAG AGCTTGGTAC GCAATGCCTG GTTCAGAGGA	240
GATATTTGTT CATCGCTTGC TTTTAACTGT ATCACAGCCT AGGGTGGCAT GCAGAGTTT	300
GAATAAGTGC TGAAACAGGA CAAGTGAGGT GCTTATGAA ACACACAGGC TCGAG	355

(2) INFORMATION FOR SEQ ID NO:1018:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1018:

GAATTCGGCC AAAGAGGCCT AGAAGGAAAT TGTCCCGAAT CCCTGCAGTC TTTCTGTAGG	60
TTGCGGCACA ACGCCAGGCA AAAGAAGAGG AAGGAATTAT ATCCTAATCG GTGGAGGTCG	120
ATTTGAGGGT CTGCTGTAGC AGGTGGCTCC GCTTGAAGCG AGGGAGGAAG TTTCTCCGA	180
TCAGTAGAGA TTGGAAAGAT TGTGGGAGT GGCACACCAC TAGGGAAAAG AAGAAGGGGC	240
GAAGTGGTCT TCTTGAGGAG GTCAACCCCC AGAATCAGCT CTTGTGGCCT TGAAGTGGCT	300
GAAGACGATC ACCCTCCACA GGCTTGAGCC CAGTCCCACA GCCTTCCTCC CCCAGCCTGA	360
GTGACTACTC TATTCCTTGG TCCCTGCTAT TGTGCGGGAC GATTGCATGG GCTACGCCAG	420
GAAAGTAGGC TGGGTGACCG CAGGCCTGGT GATTGGGGCT GGCGCCTGCT ATTGCATTAT	480
TAGACTGACT AGGGGGCTCG AG	502

(2) INFORMATION FOR SEQ ID NO:1019:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1019:

```

GAATTCGGCC AAAGAGGCCT AATCAAATAG TAAAGGCTGT TCTGGCTTTT TATCTTCTTA    60
GCTCATCTTA AATAAGTAGT AACTTGGAT GCAGTGCGTC TGAAGTGCTA ATCAGTTGTA    120
ACAATAGCAC AAATCGAACT TAGGATTGTG TTCTTCTCTT CTGTGTTTCG ATTTTGTATC    180
AATTCTTTAA TTTTGAAGC CTATAATACA GTTTTCTATT CTGGAGATA AAAATTAAAT    240
GGATCACTGA TATTTTAGTC ATTCTGCTTC TCATCTAAAT ATTTCCATAT TCTGTATTAG    300
GAGAAAATTA CCTCCCAGC ACCAGCCCCC CTCTCAAACC CCCAACCCAA AACCAAGCAT    360
TTTGGAATGA GTCTCCTTTA GTTCAGAGT GTGGATTGTA TAACCCATAT ACTCTTCGAT    420
GTACTTGTTC GGTTCGTAT TAATTTGACT GTGCACGATC TCGAG                      465

```

(2) INFORMATION FOR SEQ ID NO:1020:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1020:

```

GAATTCGGCC TTCATGGCCT AGGATTTCGT ATGCAAGCTC TTGTTTCTCA GGCTGCCTGC    60
AGAAGAAGTC GCTATAAATT ATCTGTTGTC TACATGGTAC AAGGCCCAT T GACTCATCTG    120
ATGCTTGTTT TGTTAATTTC TTTAATATTT TTATCACGGG GCAGTGGGAG GGCTTGGGCT    180
TTTAGCCACA GCTGTTTAA GACTTCTGAT CTCCTGCCCT GCAGGAATAG GTGGCAACTC    240
GAG                                                                243

```

(2) INFORMATION FOR SEQ ID NO:1021:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1021:

```

CTCCACCGAG AGCCTGGACA GTATGAAGGC TCTGACAGCC GCCATCGAAG CTGCAAACGC    60
CCAGATCCAT GGCCCTGCCA GTCAACACAT GGGCAATAAC ACTGCCACCG TCACCACCAC    120
GACTACCATA GCCACCGTCA CCACGGAGGA CAGGAAGAAG GACCACTTTA AGAAAAATCG    180
ATGCCTGTCT ATCGGGATAC AGGTGGATGA TGCTGAAGAA CCTGACAAA CAGGGGAGAA    240
TAAAGCACCC AGTAAGTTCC AGTCCGTGGG AGTGCAAGTA GAAGAAGAGA AGTGCTTCCG    300
CAGGTTCACT CGATCCAACA GTGTGACGAC AGCAGTACAG GCCGACCTGG ACTTCCATGA    360
TAATCTGGAA AATTCTCTGG AATCTATAGA GGACAATTCTG TGTCTGGCC CCATGGCCAG    420
ACAGTTCTCC CGCGATCTCG AG                                          442

```

(2) INFORMATION FOR SEQ ID NO:1022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1022:

```
GAATTCGGCC TTCATGGCCT AGATGATCAG GTTTTCTGG ATGGAAATGA GGTGTATGTA    60
TGGATCTATG ACCCAGTTCA CTTTAAAACA TTTGTCATGG GATTAATTCT TGTGATTGCA    120
GTAATAGCGG CCACCTCTT CCCCCTTTGG CCAGCAGAAA TGAGAGTAGG TGTTTATTAC    180
CTCAGTGTGG GTGCAGGCTG TTTTGTAGCC AGTATTCTTC TCCTTGCTGT TGCTCGATGC    240
ATTCTATTTC TCATCATTTG GCTCATAACT CGAG                                274
```

(2) INFORMATION FOR SEQ ID NO:1023:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1023:

```
GAATTCGGCC TTCATGGCCT ACTTTTCCAG AAACCAAGAG TGGCTCTACT GTGGCTATAT    60
TATTATTGTT ATTATTATTA TTTTGAGAT GGGGTCTCAC TTTGTCATCC AGGCTGGAGA    120
GCAGTGGCAC CATCATAGCT CACTACAGCC CCAAAGTCTG GTGCTCAAGG GATCCTCCTG    180
TCTCAGCCTT CTCGAG                                196
```

(2) INFORMATION FOR SEQ ID NO:1024:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1024:

```
GAATTCGGCC TTCATGGCCT AATCATTTAT ATAAAGTTTA AAAACATTTC AGAACTGAAC    60
TATATATTTT TAGAAATATC TGCATATGCC ACATAAATTT TAAAAATCAT AAGAATGCTA    120
AACAGCACAT TCAGGACAGG GTGAAGAAAC AGGCATGCAG GTTGTGCAGT AGGAAGCTGG    180
GTAACATTGT TCCTTATGGC TTGTTGTCG CTTCCAGAAT TTCATTAAAA ACTTTTAAA    240
AAACATGGGC CCACATTATG AATTACGTCT GCTTTTAGAG TACTAAAAAC TCCAAGCAAA    300
AACACATGAG CCACCGGCA CGCCTGGCCT TTATTTTATT TTTCTACGTT ATTATTCCTG    360
TTTTCAGAGG AGGGAATTGT CAGGGAAGTC TCGAG                                395
```

(2) INFORMATION FOR SEQ ID NO:1025:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1025:

```

GGAGAGCTCT GGGCCAGCCC TTCTCTCTCT CTCTCTCTCT CTCTCTCTCT CTCTCTCTCT    60
CTCTCTCTCT CTCTCTCTCT CTCTCTCTCT CTCTGTGTGT GTATATATAT ATATATANAC    120
TTTTCCCTTC TGGATGCAAT AGAGCTATTT TTTTCTCTTT GGAATTGAGT GACACCACCA    180
AGATACGTTT TTGGGTTGAA TATGTGTGTT TTTCAAAATT CAGTCTGGCC TTTTGTGTTG    240
TTGTTGTTGT TGTTTTCTTT AGATGGAGTT TCACTCTTGT TGCCCACTCT GGAGTGCAAT    300
GGCACTATCT CTACTCACTG CTACCTCCGC CTCCCAGGTT CAAGCAATTC TCCTGCCTCA    360
GCCTCCCAAG TAGCTGGGAT TATAGGCATG TGCCACCATG CCCAGGCAGT TTTTGTATTT    420
AGTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1026:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1026:

```

GAATTCGGCC TTCATGGCCT AGAGAACTGG AGCCAGCTGT CAACTGCCCC CGCCCCACCC    60
AGGCCATTTG GCTTCTGCTA CCGGCATGCT GCTCAGGGCT CTGCCCAAGG ACAACGACGA    120
GCCCCCTGTG TCCTCTCCTG GGTCACTTTC CATGACCCCTG AGGCAGCGAA GACAAGCTCG    180
GCAGCTCCCT GAGCTGCTTC ACACCAACTA CCTATGAGTC TGAGGCCAGC ATCCAGGCGC    240
TGCCCAAGCC CTGAGAGTCC CTGGACCATG ACGTAGCCTG TGTGTGAAGG GAGCAAGACA    300
GCCTTGACAG AAGCACAGAG AACGCCACTG GGATTCTTAA AGACGCGAAG GGAAAAAGCA    360
CAGAAGATGC TGGCGTGCA TCTCTCCAG CACCGAGAGG CCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1027:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1027:

```

GAATTCGGCC TTCATGGCCT AAATTAATAT CTTATTTTTC GCAGATTAGG AAATAAGAC    60
GTACTGAGGC TGGGTGCCTG GTTCAAGATC ATATAGCTAA CATTATTGGA CATGCAAATC    120
AAGCCAGAT TTGTGACTCT GAGCTGATGT TAATTCTGTC ACAATATTGG TTCTCAAGAT    180
AAATCTTTCC AGGTGAGGGG GAAAGGGAAT AAATATCTAG AAGTCCCCCT AAACAGAAGT    240
AATTAATTCC TTTGCAGAAA TTGGCAAAAT TTGGGGTTCC CTTCTTAAAA GTTTCCTTCT    300
GTCATTGGA AAAAATTTAA AATATGTGCA TTAGGTTGAC AAAGATCAAA AAAGTTAAAA    360
AAAAACCTT TTTGGAATGC TGTGGAGAAA GTAGCACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:1028:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1028:


```

GAATTCGGCC TTCATGGCCT AAGGGGCTGA AATTAAGAAT GTGGCTTTTT TATCCTTTCA      60
AAAATAGATT ATTTGGCTGG ATGTGGTGGC TCACGCCTGT AATCCTAGCA TTTTGGGAGG      120
CTGAGGCAGG CAGATCACCT GAGGTAAGGA GTTCAAGACA AGCATGTCCT GGTGAAACCC      180
CATCTCTACT AAAAATACAA AAAATTAGCC AGGTGTGGTG GCAGGTCCT GTAGTCCCAG      240
CTACATGGGA GGCTGAGGCA GGAGACTCAC TTGAACCCGG AGTGTCTCGA GGCAGGTCTA      300
GAATTCAATT AGGCCATGAA

```

(2) INFORMATION FOR SEQ ID NO:1029:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 252 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1029:

```

GCAGATTTTC GCTCTCATCC CATATCTATT GAGAATGCTG TAGTTGAGGG TTGTTAGAAA      60
CCTGCATTTT ATTAATAATCC CTCCAGGTGA TTCTGATGCA GGCTAGTTCA GTAAACAATA      120
TCAACTAGTT TTCATAAAGA AAACCTCTGG AGGGCCCATATA GTGCCTGCAC TCCAGGTCTC      180
AAAGTATACT TTGAGATCTA GGTATCTGCG CAAGGTGCTA TCCTGAAAGG ACTCTAAATG      240
AGACAACCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:1030:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 280 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1030:

```

GAATTCGGCC TTCATGGCCT ACCTTATGGC CTAATTAAAT ATTAGTAATA GGTATTCGAT      60
TTGTTTTTAA ATGATTTCTT GTAATAGACT ATTGGGTCAG CTAATACTTT TTTGCATCTT      120
CATATTTTAT GTCATGTTAA TGATAAATTT TCTGACTTTG ATTTGTATGT TTTTGCCCTT      180
TATCCTCTTA GGTGGCCTTG GGGGACTTGC AGGTCTGAGT AGCTTGGGTT TGAATACTAC      240
CAACTTCTCT GAACTACAGA GTCAGATGCA GCATCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1031:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 291 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1031:

```

GAATTCGGCC TTCATGGCCT AGAGCAAGTG GTTTTTAAAT ATCTTCGAGC TGAACCTGAG      60
GACCATTTATT TTTTAATGAC AGAACCTCCA CTCAATACAC CAGAAAACAG AGAGTATCTT      120
GCAGAAATTA TGTTTGAATC ATTTAACGTA CCAGGACTCT ACATTGCAGT TCAGGCAGTG      180

```

CTGGCCTTGG CGGCATCTTG GACATCTCGA CAAGTGGGTG AACGTACGTT AACGGGGATA 240
 GTCATTGACA GCGGAGATGG AGTCACCCAT GTTATCCCAG TGGCTCTCGA G 291

(2) INFORMATION FOR SEQ ID NO:1032:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 277 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1032:

TAAAATAATT TAACTTTTTT ATTACATTAA AAAACAGGAC TCTGGGAATT GTCACCTTAT 60
 GATCAGCCTT ATATTTTTTC CAGACTGTGT CATTGTGTAT GCCTGTGCCA CCCAACGGAT 120
 GAGACCACTG ATCATGTTTA GCTCAAATTT ATGTTGGATA GAGGTTATAG GATGGTCCTT 180
 ATCTGAATGC AGAAAGGAAT GTTTATTTTG CTGTTATGTT TTATATGGGA TAATACTTTA 240
 TAATTGTGTG ACTATCCTAT TCCCAACAA ACTCGAG 277

(2) INFORMATION FOR SEQ ID NO:1033:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 298 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1033:

GAATTCGGCC TTCATGCGCT AGGTTACATG TATAAAATAA TCGTAGCTGT TAATCAAACT 60
 GATCATTGTC TATTTGTTGT TTCACATGTT TTCATTTATT TGTTCAATCA GCAAACACTT 120
 AGTTGTGTGC CAGGAATTAA AATCCAGTGT TGTTCTTTTC TTATTTTTTT TTTGGCTAGT 180
 GGAAATGAA AACCACTGTG ACTTTGTAAA GCTGCGGGAA ATGCTCATTT GTACAAATAT 240
 GGAGGACCTG CGAGAGCAGA CCCATACCAG GCACTATGAG CTTTACAGGC ATCTCGAG 298

(2) INFORMATION FOR SEQ ID NO:1034:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 339 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1034:

GAATTCGGA AGACACTGAC TGACTGGAAG ACCTGGATTT CTTTCTGGAA GACACTGATT 60
 GACTGGAAGA CCTGGATTTC TTTCTGGAAG ACACTGATTG ACTGGAAGAT CTAGATTTTT 120
 CTGGAAGAAC TAGATTTACT GGAAGACTTG GATTTGGTGG AAGACGTAGA TTTTCTGGA 180
 AGACACTGAC TGACTGGAAG ACCTGGATTT CTTTCTGGAA GACACTGATT GACTGGAAGA 240
 CCTGGATTTC TTTCTGGAAG ACACTGATTG ACTGGAAGAT CTAGATTTTT CTGGAAGAAC 300
 TAGATTTACT GGAAGACTTG GTAGGCCATG AAGGTCGAG 339

(2) INFORMATION FOR SEQ ID NO:1035:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 263 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1035:

```
GAATTCGGCC AAAGAGGCCT AGCACTGTAA AGATGAAGCT GGCTAACTGG TACTGGCTGA      60
GCTCAGCTGT TCTTGCCACT TACGGTTTTT TGGTTGTGGC AAACAATGAA ACAGAGGAAA      120
TTAAAGATGA AAGAGCAAAG GATGTCTGCC CAGTGAGACT AGAAAGCAGA GGGAAATGCG      180
AAGAGGCAGG GGAGTGCCCC TACCAGGTAA GCCTGCCCCC CTTGACTATT CAGCTCCCGA      240
AGCAATTCAG CAGAGATCTC GAG                                         263
```

(2) INFORMATION FOR SEQ ID NO:1036:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 262 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1036:

```
GAATTCGGCC AAAGAGGCCT AAAGCACCCG CTTCTCACC ACCCCCACTG TTGGGCCTAT      60
AGTAGCAGGT TAGTGAGTAC CTAGGGCGGC TCAACTCCTC CCACAGCACC AACCCAGCAT      120
GGTCCCACTG AAGTCCTACT ACGCCCTCCC CTCCTCCAGCC TTTTCCAGAA ACCATACTGG      180
GCTCAGATCA GAGCTCCGAA GCGGTCAAAG TGAGCTGAGC AGGACAGGCC CAGCCTTTCT      240
CCTAGCCAC  GTCACCCTCG AG                                         262
```

(2) INFORMATION FOR SEQ ID NO:1037:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 285 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1037:

```
GAATTCGGCC AAAGAGGCCT ACGGAGCTGT CAGCCAGGGG AGTGGGGTCA GCCGTCAGCC      60
AGCCCTCCCG TTTCCCGCCC GTGGGCCCTG ACCCACTCC CTTTCTAGA AGTCAATCCT      120
AAGGTTTCTC TGCTCTGGCT AAGAGGATGT AAATTTGGAT TCTTAGAGGG CATGGCACCC      180
CCAGTCCCTG CCCAGATAAA GTAGCACAGT GGCATGCAGC ACCTCTGTCT GTTGCTGACG      240
TTGGGGGGCT TACACACCCA CCTCATCTCC GTGCACAGAC TCGAG                                         285
```

(2) INFORMATION FOR SEQ ID NO:1038:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 291 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1038:

GAATTGGGCC	TTCATGGCCT	AGCTCTGCAA	GGAAGAGAGC	TTCACGTCTC	TGGTCAGCCA	60
AGCGAGGCTG	TCTCTCCAGC	TCTCAGAGAG	CTCTCGGGGC	TCTCCTGCAG	GAGACCAGGC	120
CAATGCTCCT	GTGCTTCCTG	GGGCCAGTAG	CAGCACCTCG	AGCTCCCTGC	CACCAGGCAG	180
CTGAAAGGCA	TAGCGTGAGG	TGCTTCTCTC	AGTCCCAATT	ATGACAGTGG	CCACCGGAGA	240
CCCAGCAGAC	GAGGCTGCTG	CCCTCCCTGG	GCACCCACAG	GACGCCTCGA	G	291

(2) INFORMATION FOR SEQ ID NO:1039:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1039:

GAATTGGGCC	TTCATGGCCT	AACTCTACAG	CAGTGCTTAT	TTTTACATTT	CCAAGCGAAT	60
ACCAAAACCT	TCAGCAAAGA	TTGGGTGGGT	ATTAACGGGT	TTTTGTCTCA	GAAGTGTATT	120
GTGGATCCCG	GAGTTTCCCC	CAAATCCATC	TACATCAAAT	TTGTAGAAGT	AGAGAGGGAT	180
TTTCTTTCCG	CAGGCTCTTT	AGTTGAGTGC	CTGGAAAAAG	CCATTGGATA	CCCCTTAAAA	240
TTTAACAAC	GAATGTCATC	CTTCATAAGG	ATTGGGGCTC	TTAGCTCCTT	CTTCTCTACT	300
CACTTCCCAT	TACCCGGACC	ACCCCTCATC	CAGATGCCGC	CGTCAGACTC	TTCATGGAAA	360
CCCTTTCTTC	AATTGGGCCA	GTACGATCTC	GAG			393

(2) INFORMATION FOR SEQ ID NO:1040:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 603 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1040:

GAATTGGGCC	AAAGAGGCCT	ACCCTACTGT	GACACACCTA	CCATGCGGAC	ACTCTTCAAC	60
CTCCTCTGGC	TTGCCCTGGC	CTGCAGCCCT	GTTCAACTA	CCCTGTCAA	GTCAGATGCC	120
AAAAAAGCCG	CCTCAAAGAC	GCTGCTGGAG	AAGAGTCAGT	TTTCAGATA	GCCGGTGCAA	180
GACCGGGGTT	TGGTGGTGAC	GGACCTCAA	GCTGAGAGTG	TGGTTCTTGA	GCATCGCAGC	240
TACTGCTCGG	CAAAGGCCCC	GGACAGACAC	TTTGCTGGGG	ATGTACTGGG	CTATGTCACT	300
CCATGGAACA	GCCATGGCTA	CGATGTCACC	AAGGTCTTTG	GGAGCAAGTT	CACACAGATC	360
TCACCCGTCT	GGCTGCAGCT	GAAGAGACGT	GGCCGTGAGA	TGTTTGAGGT	CACGGGCCTC	420
CACGACGTGG	ACCAAGGGTG	GATGCGAGCT	GTCAGGAAGC	ATGCCAAGGG	CCTGCACATA	480
GTGCCTCGGC	TCCTGTTTGA	GGACTGGACT	TACGATGATT	TCCGGAACGT	CTTAGACAGT	540
GAGGATGAGA	TAGAGGAGCT	GAGCAAGACC	GTGGTCCAGG	TGGCAAAGAA	CCAGCATCTC	600
GAG						603

(2) INFORMATION FOR SEQ ID NO:1041:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1041:

GAATTCGGCC TTCATGGCCT ATAGAAACAT CAGTGGGCAC ATTTACAACC AGAATGTATC	60
CCAGAAGGAC TGCAACTGCC TGCACGTGGT GGAGCCCATG CCAGTGCCTG GCCATGACGT	120
GGAGGCCTAC TGCCTGCTGT GCGAGTGCAG GTACGAGGAG CGCAGCACCA CCACCATCAA	180
GGTCATCATT GTCATCTACC TGTCCGTGGT GGGTGCCCTG TTGCTCTACA TGGCCTTCCT	240
GATGCTGGTG GACCCCTCTGA TCCGAAAGCC GGATGCACAC ACTGAGCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:1042:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 331 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1042:

GAAGAAAAGC AGAAAGAACT GGCAGAAACA GAACCCAAAT TCAACAGTGT GAAAGAGAAA	60
GAAGAACGAG GAATTGCTAG ATTGGCTCAA GCTACCCAGG AAAGAACGGA TCCTTATGCA	120
AAGCAGGGTC GAGGAAGCCA GTTTACATCA AAAGAAGAAA GGGATAAGTG GATTAAAAAG	180
GAAGTCAAGT CTTTAGATCA GGCTATTAAT GACAAGAAAA GACAGATTGC TGCTATACAT	240
AAGGATTGCG AAGACACTGA AGCAAATAAA GAGAAAAATC TGGAGCAGTA TAATAAACTG	300
GACCAGGATC TTAATGAAGT CAAAGCTCGA G	331

(2) INFORMATION FOR SEQ ID NO:1043:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 268 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1043:

GATGGCCACT TCCCAGGCTG ACATAGAGAC CGACCCAGGT ATCTCTGAAC CTGACGGTGC	60
AACTGCACAG ACATCAGCAG ATGGTTCCCA GGCTCAGAAT CTGGAGTCCC GGACAATAAT	120
TCGGGGCAAG AGGACCCGCA AGATTAATAA CTTGAATGTT GAAGAGAACA GCAGTGGGGA	180
TCAGAGGCGG GCCCCACTGG CTGCAGGGAC CTGGAGGTCT GCACCAGTTC CAGTGACCAC	240
TCAGAACCCA CCTGACGCAC CCCTCGAG	268

(2) INFORMATION FOR SEQ ID NO:1044:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 391 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1044:

```

GTCATTGCAT CCAAGATAAT GAAATATCTA TAACCCCAAA AGTTTCCTGT GTECCCTTGT      60
TATTCATTGC CCTGCCAGT ATTCAGGCAA CACGGATCTG TTTTCTGTTT TAGGTTAGTT      120
TGCATTTTCT ATAAAGTCTT ATGAATGAAA TAATAAAATG TGGACTATTT TCATGGGCCG      180
GGGAGCAGTG TGGCTTCTTT CATTTCAAAT GATTGTTTGG AAATTCATCC ACAGCGTTGC      240
ACGTATCAGT AGTAGATTCC ATTTGATTGT TGATTTGTAT TCTATTGTAT GCCTGAGTCA      300
AAATTTATTC ATCTCTTTGT CTGTTGATAG CCATTTGGGT TCTTCCAGTT TGGGGCCATT      360
ACAAATAGAG GTACTATGAA CTTTCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:1045:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1045:

```

GAATTCGGCC TTCATGGCCT AATGTGAGCC ACCGCACCCA GCCGAATATT TGTACTTTGT      60
ATAAATTCAT TGCTGTGTTT ACAGTTTGAA TGGCTCTTTT ACCCTGGCAT AATTTTGTA      120
CGTGTGGAGC ATTTGGAAAA TTTTATTGG ATTATGCAGA TATTTTCAAT GCTGGTATTT      180
CATTATATGA TAGTAAAAAA TCACTTTGTG TTTTGTGTTG TTTTGTGTTT TTTTCTTTT      240
TTTTTGAGGC AGAGTTTCGT GCTTGTCGCC CAGCCGAAGG CGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1046:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1046:

```

GAATTCGGCC TTCATGGCCT AGTAACTTCA TAACATTGCT GGTGTTGAGG TGAATCTTAG      60
TGGTCATCCA GTCCAAGGC ATCCTTGCCA GCCCCCTACA ATACCTGGAT GGGCGCTTAT      120
CTTCAGGTAG GCCTGAGCCT TTCTGGTAAA GAGGAGCTCA CTATTTCTAA AGGAAACCTG      180
TGCCATTGGG TTAAAAAAGT ATTAATTTT AAACATTGGT AGTTGTTAAG CAGTTGTTGA      240
ATATTTTGTG CCAAATTTG TTACCTCCCA TACCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1047:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1047:

```

GAATTCGGCC TTCATGGCCT AGCAGCATTC AAGGAATTAA TATTAGTCAC TGAGAACAAA      60
AAGCGAAATT AGAAAATTC AAGTCACTTC TAGGCTTGTA GGGGAGAAGA CGTGTAGTGA      120
TGAATTCTAT CATTTATGAA GTACCCACTG GATCCACAC ACTGTGCAAG ACCTTTAGAT      180
CAGGCGCCTC CCTCGGTTT CTTCACCCTG TGCAGCAGGT GCTGTTATTT CCTTTTAA      240
ATTATTATTT ATTATTATTA TTTTGTGAGA CAGGATCTCC CTTTGTCACT CAGGCTGGAA      300
TGCAGAGGCA TGATCACTGC TCACTGCAGC TTCGACCACC CGATCTCGAG      350

```

(2) INFORMATION FOR SEQ ID NO:1048:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1048:

```

GAATTCGGCC TTCATGGCCT AAAGCTTTTC AGTACTGTTT ACAAATTTGG TTTTATTGTG      60
TCAACTTAAA AGCATGAGTC TAAATCTATT AGTCATACCA AATTGTTTCA TTTTATTTTA      120
TTTTATAGAG ATGGGGTCTT GCTGTATTGC CCAGGCTGGT CTCAAACGAC TAGGCTCAAG      180
CGATCCTCCC ACCTCAACCT CCCAAAGTGC TGGGATTACA GGTGTAAGCC ACCATACACA      240
GTTCTCAAAT TATTTTATAC AATACAAACA TTAAATATAT AAATCATGCA CTCTCGAG      298

```

(2) INFORMATION FOR SEQ ID NO:1049:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1049:

```

GAATTCGGCC TTCATGGCCT AGAGCTTTGG TGCTTTTCAC ATAAGGAACT TACTTGGGCT      60
AAAAAGTAAC CTCAGAGAAA CAGTGCTCCC ATTTGGTGGA TAAGGAACT GAGGTTCCAA      120
ACATGAGATG TAATAGCTTG CCCCAAATCT AGCCAGTGAG CAAGAGAGTA GACTTTTGCC      180
TGTGCCAAA CAGTAATCAC CATCCACAAG TGGCTATTTA AATTTTAATT ATTACAATTA      240
AATAAAGTTT AAAATCCAGT TCCCCAGTCC CACTGGCAAC TTAACAGCTA CCAGTGACTG      300
TACCATATAT AACAGCATAT ATAGACATAC AGCATATACA ACACATACAT AGGGATTCCC      360
ACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1050:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1050:

```

GAATTCGGCC TTCATGGCCT ACAATTTTAA AATTAAAATT TTTTCTATTT TTTTGCAATT      60
ATCAACCTAA CACATTGAAG AAACCTGGGA AATATAGAAA AAACACACCA AAAAGTATCA      120

```

```

GAGTTACACT AAAATGTTCA TAGTCAGTAA TATAGTCTTT CAGATTTTTT TTTCTGTGTC      180
TGTCTGCTGT CTATGTCCAT GCCTACCTTA CTTTCTTCCC TCTCTCTTCC CTCCCCACCC      240
TCCCTTCCTT CCTTCCCTCC TTCCACCTT CCCTGCTTCC TTCTGCTGCT CCTCCCTTCC      300
TGCCTGCCTC CCTTCCCTGC ACTTACATTC TGTTAACAAT GAGAAAAAAA TTCCCCATC      360
ACTCGAG                                         367

```

(2) INFORMATION FOR SEQ ID NO:1051:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1051:

```

GAATTCGGCC AAAGAGGCCT AAGAAGACCT CAGCCTTCGC CTGAAAAGC TGACTCACGC      60
TGCCCCCTGC ATGCTGTTCA TGAAGGGAAC ACCTCAAGAA CCACGCTGTG GTTTCAGCAA      120
GCAGATGGTG GAAATCCTTC ACAAACACAA TATTCACTTC AGCAGCTTTG ATATCTTCTC      180
AGATGAAGAA GTTCGACAGG GGCTCAAAAC GTACTCTAAT TGGCCACCT ATCCTCAGCT      240
CTATGTTTCT GGAGAGCTAA TAGGAGGACT TGACATAATT AAGGAGCTGG AAGCATCAGA      300
AGAGCTGGAC ACGATCTGTC CCAAAGCACC CAATCTCGAG      340

```

(2) INFORMATION FOR SEQ ID NO:1052:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1052:

```

GAATTCGGCC TTCATGGCCT ACTATGGACA GCCACAGNTC TTCCAGGAC AAGACCCCTGA      60
CTCACCCAG CATGGAACT ACCAGGGAGG GAGGGTCCCC CATCCTACTA TGACAACCAG      120
GACTTCCCTG CCACCAACTG GGATGACAAG AGCATCCGAC AGGCCTTCAT CCGCAAGGTG      180
TTCCTAGTGC TGACCTTGCA GCTGTCGGTG ACCCTGTCCA CGGTGTCTGT GTTCACTTTT      240
GTGCGGAGG TGAAGGGCTT TGTCCGGAG AATGTCTGGA CCTACTATGT CTCCTATGCT      300
GTCTTCTTCA TCTCTCTCAT CGTCCTCAGC TGTTGTGGGG ACTTCCGGCG AAAGCACCCC      360
TGGAACCTTG TTGCACTGTC GGTCTGACC GCCAGCCTGT CGTACATGGT GGGGATGATC      420
GCCAGCTTCA ACAACACACT CGAG                                         444

```

(2) INFORMATION FOR SEQ ID NO:1053:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1053:

```

GAATTCGGCC AAAGAGGCCT AGATATTCAT TTCCATTGGA GCTGGTATTT TTAAGGTCTC      60

```



```

GTGACGTCAG TGACCTCATT TTA CTGATC TATTAGCAGC ATTCATACA GTTGTGACT 120
CTTCTCCATT AAAACATTTA CTTTATTTGG CTCTAGGAA ACATATTTTC CTGCTTTTTC 180
TTCCTATTTT TCTGACTCTT TTCTCAGTTT CCTTGCTGT TTCCTTTTCT ATCCTCTAAA 240
CATTGAAATA TCCTAAGCCT AGTTTGGGAT TCCCTTGATG GTCTTCATTT CTTTAAATGGG 300
AACTGTGCTG GTGACTCAAA TTTATATCTC CAGCCAGAAC CTTTCTCCTG AATTCAG 358

```

(2) INFORMATION FOR SEQ ID NO:1054:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1054:

```

CCTTCATGGC CTACTTCTGG TATTACATCA CACTGATCAT GCTGCTGGTG GCCGTGCTGG 60
CCGGAGCTCT CCAGCTGACG CAGAGCAGGG TTCTGTGCTG TCTTCCATGC AAAGTGGAAT 120
TTGACAATCA CTGTGCCGTG CCTTGGGACA TCCTGAAAGC CAGCATGAAC ACATCCTCTA 180
ATCCTGGGAC ACCGCTTCCG CTCCCCCTCC GAATTCAGAA TGACCTCCAC CGACAGCAGT 240
ACTCCTATAT TGATGCCGTC TGTTACGAGA AACAGCTCCA TTGGTTTGCA AAGTTTTTCC 300
CCTATCTGGT GCTCTTGAC ACGCTCATCT TTGCAGCCTG CAGCAACTTT TGGCTTCACT 360
ACCCAGTAC CAGTTCAGG CTCGAG 386

```

(2) INFORMATION FOR SEQ ID NO:1055:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1055:

```

CGATTGAATT CTAGACCTGC CTGTGCTCCT CGATGGTGTC TCTCCCTCCA GAAAACGCAT 60
GCTTATTGAC CTTGGTTTTG ATCTGCTTGG CCGTGTCGCT CGAG 104

```

(2) INFORMATION FOR SEQ ID NO:1056:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 650 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1056:

```

GAATTCGGCC AAAGAGGCCT ACACAAGGCT AAGGGTATTG GATATAACGG AAAGTGGAAG 60
CTATACCTGA CTTCCAGAGA ATGTGGACCG GATATAAGAT CTTAATCTTC TCTTATCTTA 120
CTACAGAAAT CTGGATGGAG AAGCAGTATT TATCTCAAAG AGAAGTGGAC CTAGAGGCTT 180
ATTTCACTAG GAATCACACC GTTTTGCAAG GTACTCGATT CAAAAGAGCC ATTTCCAAG 240
GGCAATACTG TAGAAATTTT GGCTGTTGTG AAGACAGAGA TGATGGCTGT GTCACTGAGT 300
TCTATGCGGC GAATGCGTTG TGCTACTGTG ATAAATTCTG TGACAGAGAA AATTCTGATT 360

```

```

GCTGTCCTGA CTACAAGTCC TTTTGCCGTG AAGAGAAAGA ATGGCCTCCT CACACACAGC      420
CTTGGTATCC AGAAGGTTGC TTCAAAGATG GTCAACATTA TGAAGAGGGA TCAGTAATTA      480
AAGAAAACTG CAACTCCTGC ACATGCTCAG GACAGCAATG GAAATGTTCC CAGCATGTAT      540
GCCTTGTTTCG TCCAGAATTA ATTGAACAGG TCAATAAAGG AGACTATGGA TGGACAGCAC      600
AGAATTACAG CCAATTTTGG GGAATGACTT TAGAAGATGG ACTCCTCGAG      650

```

(2) INFORMATION FOR SEQ ID NO:1057:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 378 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1057:

```

GAATTCGGCC AAAGAGGCCT ACACGTATTG GCCAGGATGG TCTTGATCTC CTGACCTCAT      60
GATCCGCGCG CCTTGGCCTC CCAAAGTGCT AGGATTACAG GCGTGAGCCA TCGCGCCCAG      120
CTGAGAATAG TTTTAAGAAT TGTTTGAGAG GCAGTTGCTT TTTCTTTGAA TATCTAGAAC      180
TGTTCTGGAC TAACGTCAAA GAAACACCAT GGCAACATTA AAGGGAAGAT TATTTGAGAG      240
GCGGGGGATA GTATGGCTTA GGACTTGGGC TGCTACCTTT GACTTTGTAA TTCAAAAGAT      300
TGTAATGTTT CATATTTTCA ATCTGATCAT TAAAAATATC TGTGTTACAT GCAAAAAAAA      360
ACCTATAGGC AACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1058:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 259 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1058:

```

GAATTCGGCC TTCATGGCCT AATTTTAACA TTTACATAGA CAATTCATTT GGTGTTTTGT      60
CTCCTAGTTA TTGGGCCCAA TCTCTGATGA TTTCCACTCT GTCTTGGCCA CTCACTCCGT      120
TTGTCATATC TTGGCCATTA TCATCACCTC AAATTGCTCC ATCTTCAAAA TACTTGTCATC      180
TTATTTATG ACCATATTCC TTCCACTTGG TTTATTGAAC TATCCCTCT ATCATTCTCT      240
GATTTCACTG CAGCCAATG

```

(2) INFORMATION FOR SEQ ID NO:1059:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 246 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1059:

```

GAAAAAACT ACTAACCACT GCAAGCTCTT GTCAAATTTT AGTTTAATTG GCATTGCTTG      60
TTTTTTGAAA CTGAAATTAC ATGAGTTTCA TTTTCTTTT GAATTTATAG GGTTTAGATT      120
TCTGAAAGCA GCATGAATAT ATCACCTAAC ATCCTGACAA TAAATCCAT CCGTTGTTTT      180

```

TTTTGTTTGT TTGTTTTTTC TTTTCCTTTA AGTAAGCTCT TTATTCATCT TATGGTGCAG 240
CTCGAG 246

(2) INFORMATION FOR SEQ ID NO:1060:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 103 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1060:

GAATTCGGCC TTCATGGCCT ACGAGAGTAT ATTGGTAGGG CTGGAATTC TGGTTCATAT 60
GGTAACTAAC TCTATGTTGA ACATTTTGAG GAGCCCTCTC GAG 103

(2) INFORMATION FOR SEQ ID NO:1061:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 361 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1061:

GAATTCGGCC TTCATGGCCT AAAAGGTTAG GCAATCACTG GGACCCGCAT GGTGTTCTC 60
CAAAGAATAG GGTAAGGAG AGCTGGGAGG GAGCCCTCTC CGTTGGGTGA CTCTGTGTG 120
CCCTTTAGAC AGGCTGGCCT GCCGGTTCCA CAGGGTACAG TTAGGACTTG AGTCTTTCTT 180
TTTCTGTTT GAGTTGGTGA GTGAGTGATA GGGTAACATG GGCCTTCAGG ATGACCCCTT 240
GGAACTGTGC CGAGTTCCTT AAATCTCAGC TGGGATCCTG GACCTGGGAG GCCCTGTGA 300
GGGCCAGCTC TGGAAAAACC TGGGAGTTGA TGCCGGAGGC TGTGGAAGAA CTCTGCTCGA 360
G 361

(2) INFORMATION FOR SEQ ID NO:1062:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 292 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1062:

GAATTCGGCC TTCATGGCCT AAGAAAAATT GGGAACAAGC TAAGTGCCCA CATAGTTACA 60
AAAATTACGT TAAATAGATA CACGGTTGCT TTAAAGCTCC ACATACAGCA CCATAGAGCT 120
TTTTATATAT TTGTAGGCAT TAAAGCAATT CCAGGAAGGA TCTAAACCAA ACACTTGACC 180
CAGGTTGTCT CTCTGGGAG TGGAGCCACA TGGGATTTC CTGTTTCTGT ATTCTTATTA 240
CTTATATTAA AACACACATG AACAGAAGAA AAAATAGCCC CAGTATCTCG AG 292

(2) INFORMATION FOR SEQ ID NO:1063:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 331 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1063:

GAATTCGGCC TTCATGGCCT ACCGTTGTTA CACTTCTGGA CACAAGTTGG GCCGAAGTAA	60
GCCAAGCCCA GTCCTTCCTG TTTCCTTTCT CAGGAAATGT GACCACGTGC ACTGGGAAGC	120
TTTGTGTAAG GTAGATAGGG GTATGAGCCA ATTGCCCAGC ATTGGTGTTC TGTTCCTTGT	180
TTGTTTGTTC GTTTCACAG AGTCTTGCCC TGTCACCCAG GCTGGAATGC AATGGCGTGA	240
TCTCAGCTTA CTGCAACCTC TGCCTCCCAG GTTCACACAA TTCACCTGCC TCAGCCGCCT	300
GAGTAGCTGT GATTACGGGC ACCGTCTCGA G	331

(2) INFORMATION FOR SEQ ID NO:1064:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 136 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1064:

CGAGTGTTAC ATTCGTTCTT CCGCTCAAAT CCTGATCTGG TCCATTAAAG AGTGTTTCGA	60
GACAAAGTTT CTGAAAGATT AGAGAAGAAT CCCCAAGAA TCAATTACAA CCAAATGGA	120
AAGGGACAAC CTCGAG	136

(2) INFORMATION FOR SEQ ID NO:1065:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 255 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1065:

GAATTCGGCC TTCATGGCCT AGAATAAAGG AAAATTCAGG TCATAGATTG AGTGCTATAT	60
TTGAAGTAAA TACAGACCTT CAAAAAATA TAATATCAAA AATCACTGCT GAGCTCTCCT	120
GGCCTTCCAT ACTTAGCTCA CCCCGGCACT TGAAATTTCC ACTTACTAAT ACAAACTGCT	180
CCTCAGAAGA AGAGATTACT TTAGAAAATC CTGCAGATGT TCCTGTCTAT GTTCAGTTTA	240
TTCTCTGGC TCGAG	255

(2) INFORMATION FOR SEQ ID NO:1066:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 379 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1066:

```

GAATTCGGCC TTCATGGCCT ACAACCTGCT TTCCACCTTC TGTAATCTCC CATCAGTGAT      60
AAATTACCCA TCAGCTTTCC AGATTCCAGA ATTTTGCTGA CATCTCCTGT TGGCTATGTT      120
CTTATTTCTT TTTCTGTTTA TTCCTGTGAC CTTGTGCCCT TTAATTCTTT CCCATAATTT      180
GTTGGGACTT CAGAAGGAAG TGGAGCTAAA GGCATGTGTC TGCCTGCCCC ATCTTGGCTG      240
GAAGTTGGGA AGGCCTTCCT TCCAAGGCAC CCAGCATAGC ACCTGGCACA TGATGGATGC      300
TCAGCAAATG TCTGTGGGTC TTCTTTTAC TAAACAGGCA GTTGATTTC AAGAGTAG      360
TGACCACCTA AGTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1067:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1067:

```

GAATTCGGCC TTCATGGCCT AACACAGCTC ACATCAGAAT ATAATAGTGG AACTAGGGTG      60
ACTTCACTCC CTTTCACCTG ATGTCTATCT TGGCCTTTTA GCACCTTGAC TATCCCTGAA      120
AAGACTGGGT CTTTGTGTTT CCAGGGAAAA AACGAAGTGA TGTAGATCTA AGAAATAGTG      180
CCTCTTTAAT ATTTAATTCT TACATGACAA CTAACACACA GGGAAAAGGC TATGTTAAGT      240
TGATTATAGC TCCTCTTAAA ATGTCCTATG CTGTCAGTTG GTCTTAGAGA CATGGGAATA      300
ACCAAGCAAT CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1068:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1068:

```

GCGATTGAAT TCTAGACCTC ACCTCTGATC TATCTCTTTT ACCTCAGCAA TTTATTTCCC      60
AATTATTATA TCTACTTTAT TGTCTTATG AGACAATAGA CTATGATAAT TTCCAGAAA      120
TAATTTTGTT TTCTTCCTCC CATCTTCTAA TGTTGAGACC GTTCTCTGT TTTCTTTCAT      180
CTCTACCCCT CAGTCTCATA GGTTTATTTT TCATTTCCAA TCCAGCGATT TCAAAACCTG      240
TACAACAAAC CAACTCAGCA GCCCTTGGCA ACTTGAGGAG ATTCACAAA CCACTCGAG      299

```

(2) INFORMATION FOR SEQ ID NO:1069:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1069:

```

GAATTCGGCC TTCATGGCCT ACCATTTCCT CAACCATTTT AATCTGCGCA TCGGTCCCAG      60
ACGTAGGGAT TCCTCGTCTC ATCTTGAAAA CATTGCCAGC AGTGGTTCCT ATTTGGAAGC      120
CTGCGTCTGT CACGTGACAC CGTCTGAGCC TGTGCCTGCC TCTCTTTCTT CCGGCAGTGC      180
CCTGTACTCT GTGGGGATGA CGGCAGTGGG CCTGGCCATC CTGTGGTATG TTTTCCGTCT      240
GGCCGGGAGA CTCGAG                                     256

```

(2) INFORMATION FOR SEQ ID NO:1070:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1070:

```

GAATTCGGCC TTCATGGCCT AGCCATCATG TTTATTAGAA GGTGATTG TGGTGTGTGC      60
TCTAGACAGA TACAGAATAA ATACCTGCGC CTTGAGAACA GGAAGTCCAC GATTCATACA      120
AAGTGCTCAC TACAGGAAGT TGCTGTGTCA AAATCCAGGC AAGGACCCAA CTCCGGGCAG      180
CCCCTCCTCC CTGCTGACCT CAACAAGGGC TGTGCTATTG TTTTTATTT TATTATTTTA      240
TTTCTCTTTA TTATTATTAA TATTATTATT ATTTGCTTTT GCTGTGGTCA CTATCATTGG      300
CAAAGTTCCT TTTCCCTCGA G                                     321

```

(2) INFORMATION FOR SEQ ID NO:1071:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1071:

```

GAATTCGGCC TTCATGGCCT AGGGAGGTAT TTGTCATTGT GAAAAGCTGG GAATCTCAAA      60
CATAGTCAAC TTAACATAAA AGAAGCTAAT ACAGGTTGAG CATTCTAAT CCAAAAATCC      120
AGAATCCAAA TTGCTCCAAA ATCTGAAACT TTCTGAATGC TGACCTGATA CTACAAGTAG      180
AAAATCCAC ATACAAGTAC TTAACACAAA CTTTGTGTTCA TGCACAACT ACTAAAAATA      240
TTGTATAAAA TTAACCTCGA G                                     261

```

(2) INFORMATION FOR SEQ ID NO:1072:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1072:

```

GAATTCGGCC TTCATGGCCT ACTTGGGCTC ATTTTATTG GTGAATTGA TCCTGGCTGT      60
GGTGGCCATG GCCTATGAGG AGCAGAAATCA GGCCACCTTG GAAGAAGCAG AACAAAAAGA      120
GGCCGAATTT CAGCAGATGC TCGAACAGCT TAAAAAGCAA CAGGAAGAAG CTCAGGCAGT      180
TGCGGCAGCA TCAGCTGCTT CAAGAGATTT CAGTGGAATA GGTGGGTTAG GAGAGCTGTT      240

```

GGAAAGTTCT TCAGAAGCAT CAAAGTTGAG TTCCAAAAGT GCTAAAGAAT GGAGGTC CCT 300
CGAG 304

(2) INFORMATION FOR SEQ ID NO:1073:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 397 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1073:

GAATTCGGCC TTCATGGCCT AAAAAAGCTA ATGTCATAGG TCTTTATATG TGGGCAGGGT 60
 TTATAAGTTG TCTAAGGGC CATCAGGTAG AGTTGGCCTT TTCTGTTGAG GTCCCCATAA 120
 TTTCAGTGGA GGTCTTCTCT TTGGGGCCAG TTTCTCTAGA AAAGTGGGTC CTGATAGTAG 180
 GGTAAAGAAA GACAGCTGAG GACCCCAAGA TTTGTATGAT GACTTTTACT TAATCCCTCT 240
 ATCTTCATCC TCTCTCATGC CCATCCGGCC CCACCCCA AATCCTCCTC TGGCTGTGTA 300
 CCCTCAGGTT CAGTTTTTCC TGTCAAGTGA GGTGAGGGT GGGGCGTAGG CTGGCTGTGG 360
 AGAGTAGGGG AGAGGACCTG GGTCCAGTA GTCGAG 397

(2) INFORMATION FOR SEQ ID NO:1074:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 309 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1074:

GCGATTGAAT TCTAGACCTG CACCACTGCG ATCCCTACGC CTGAGGAAAT GACAAGATTG 60
 AGAAGCATGA ACAGACAACCT CCAGATAAAT GTTGACTGTA CACTGAAAGA AGTTGACCTC 120
 CTTCAATCTA GAGGAAACTT TGATCCAAA GGCATGAATA ATTTTATGA CAACATAGAA 180
 CCTGCCCCAG TTGTACCACC CAAGCCATCT AAAAAAGACT CCTCAGACCC CTGCACAATT 240
 GAGAGAAAAG CCCGAAGAAT TAGCGTGACC TCCAAAGTAC AGGCAGACAT CCATGACACC 300
 CATCTCGAG 309

(2) INFORMATION FOR SEQ ID NO:1075:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 243 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1075:

GAATTCGGCC TTCATGGCCT AGAAAACTAA ACATTTCCTT TTTATAAAGA CTGACAAAAT 60
 ATAAATCTTT ATTCTAACCCT TATCCCCAAA ACTAGCCAGG CCACACCCCA GATGTTCTTA 120
 TTGACTATTG GGAAGATAGA AAAGGCGTTG TGTTTTTGT TTTTGTGTG TTGTTGTCAT 180
 TGTTGTTTTT TCAGAAGACC AGTGTCTCAG TTCTGTCTTA GTAGTACCAC ACCACGACTC 240
 GAG 243

(2) INFORMATION FOR SEQ ID NO:1076:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 598 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1076:

```
CTCGAGCTGG GGGCCACTTT GGCACCTAAC AAAACCAGAG AAAACAAGTG CAACTAAGCA      60
AGCAACTATG CACATTCCAG ACATAAAGAT CATTAAATAA CGCCTTAATC TAAGGATCTG      120
TTGGTTCTAA CGCCAGAAAA AGAAGTTAAA TTTTAAAAAA TATCTAAAAG AGATTTTAAAG      180
TGGGCAAGCA ATAGAGAAGA TACCCAACAC TGAGAAACGG AAAGGAAAAA AGACCACCCCT      240
AATAACTACT GTCATCAAT ATACATCTAT AATTCTACCA GAACAGTATT AAGAAATGAG      300
AAACGCCAAT ATTACATAAA ATAAGGTAAA AATAACTAAG CATAGGTTAG TGTCAGGGGA      360
CCTAGGGTTC AGACACCCAG AGTTTATAT AAGGATAATT TGTCCTGAAT CAAGACCACA      420
CTGTCCTCTC CTTAAACCTA ACTGCTACAA GCAGACACCA CCTTTCTGA CTGGGCTGAA      480
GTGTGGGAAA CAGTCCAAAA ATTAGGTATC ACACCATAAA CCCTCCACAA GAGCAACCTT      540
TGCTCTCAAT TAAGTTGTTG ACAAATAAT TCTCACTTG CCTAGGCCTG CCGAATTC      598
```

(2) INFORMATION FOR SEQ ID NO:1077:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 346 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1077:

```
GAATTCGGCC AAAGAGGCCT AGGTGGGTAT TTGAATGGTT TTGCTCCAAA ATTGAAGTCA      60
CATGTGTGAT ATGACATGAA ACTAGCTGCA GCAAAAAATC CAGATACAGT AGATGAAAAG      120
ACTTGCTTTT CAGGAGGCAG CTGGTTGCCA TTTAAAAAGA AGATCATTTG CTTTTCATTC      180
AAGTCTAACA GAAATCCTAC TGTATCTCCT TCTTTCAGC ATGGGTGTAT GTGAGGCTTA      240
CTTCTGGCAT TGTACCAAT CAGCTGCCGG CAGCCATCAT ACGCACAGGA GTATTCATCA      300
TCCCAATGC CGTAGCCTTC ATGATTGAGG AATTGCTGT CTCGAG      346
```

(2) INFORMATION FOR SEQ ID NO:1078:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 419 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1078:

```
GAATTCGGCC AAAGAGCCTA GTCCTGTTA CCATTATTAT TATTCATACT CATATTCATT      60
ACTTCTAACT TCAAGTGGGC CATTAGCACT AACTGGCATA CCACACTTCT CTAGTCTATT      120
TATTCTCCTT GATGACTATT TCATACCCTT CCCTCTTTCC CCAAACTTCC AACACCTCCT      180
CTTCCCATCA TTCTCAGCTG ACGGCCTTGC TTTCTCCCAT GATTGGGACT AGAGAAGCAA      240
TTTGTAGGGA ATTTCCACAA GTCCTATCAC ATGTGGCCAC TCATCTACAT CTGGATCCAT      300
```


CTATTGCGCC TTCCTATTG TTCTTATACA CTCTCCCTGT CTTACTTTAT CTAAGGTCAA 360
CATCTCCACT CCACTTATGC ACTAGATCCT GGCATTACAC CAGCAATCCT CACCTCGAG 419

(2) INFORMATION FOR SEQ ID NO:1079:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 261 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1079:

GAATTCGGCC TTCATGGCCT AGCTTATTCT TTTTCTTTT TCTTTTTTTT TTTTTTTTC 60
GAGACAGGGT CTTTCTTTGT CACCACAGGC TGCAGTGCAG TGTTGTGATC ATAGCTCACT 120
GCAGCCCTCA ACTCCAGGCC TCAAATGATC CTTCTGACTC AGCCTGCTGA ATGACTGACA 180
TTACACGTGC ATGCCGCTGT GCCCAGCTAA TTTTAAATTT TTTTGTAGAG ATGAGGTCTT 240
GCTTTGTTGC CCAGACTCGA G 261

(2) INFORMATION FOR SEQ ID NO:1080:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 208 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1080:

GAATTCGGCC TTCATGGCCT ACATTAACAG ATTAATCCAT CTGTATAGGG CTTTGTCTGT 60
TGGATAGAAT TTAAATTGTC TACATAAATA TTTGTTTTAG GACCCTTAGA TTTTATCTGA 120
ATACACAGAT TAGGCTTTAA AAACAGATAT ATATGTCATT TTTGGCTTAA GGAGTTTGGC 180
TAAGTTAGCT TTTCAACTGG TTCTCGAG 208

(2) INFORMATION FOR SEQ ID NO:1081:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 425 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1081:

GAATTCGGCC TTCATGACTC CTGATTCAGG GGTCACTTTA CTTCAATAAA AATCATTAGA 60
AAAGGAAGAA TTATGCCAAA GACTTAAAGA ACAGTTAGAT GCTCTTGAAA AAGAAACTGC 120
ATCTAAGCTG TCAGAAATGG ATTCTTTTAA CAATCAACTA AAGGAACTGA GAGAAACCTA 180
CAACACACAG CAGTTAGCCC TTGAACAGCT TTATAAGATC AAACGTGACA AGTTGAAGGA 240
AATTGAAAGG AAAAGATTAG AACTAATGCA GAAAAAGAAA CTAGAAGATG AGGCTGCAAG 300
GAAAGCAAAG CAAGGAAAAG AAAACTTATG GAAAGAAAAT CTTAGAANGG AGGAAGAAGA 360
AAAACAAAAG CGACTCCAGG AAGCCAAGAC ACCAGNAAAA ATTCCAAGAA GAGGAACGTC 420
TCGAG 425

(2) INFORMATION FOR SEQ ID NO:1082:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1082:

GAATTCGGCC	TTCATGGCCT	AAGACTTCTT	GCAGGAAAAA	TGAGTGCATT	GAGGATAGTA	60
ACCTGACTTT	CTGACCTGTG	ATTAAATTAT	GATAGTAGTC	AGTCATTTTA	CTCTCCCAGG	120
GTTTGAGGAA	GTGGCCGGTG	AGGACTTGGA	GCCTAGTGAG	GAGTTAGTAG	AGCTGCCCAG	180
GGTGAGGAG	GCCACAGAGG	ACAGCCCTGG	TGAAGAGAAC	AGTGAGGCCT	TGGATGTGTT	240
GATATCCAGC	AAGGACCTGG	CACTGTCTAG	TGAGGACGAG	GCCTGCACAG	GATCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:1083:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1083:

GAATTCGGCC	TTCATGGCCT	AAGTCACTTG	TGTAACGTAG	TTATACTTTG	CTGCATTNTA	60
ATTAACCTTC	AACAGCTATT	AAAGTGGAAT	GTAAGTTAAA	TTTTGAAGGA	AAGGAAATAA	120
ATGTTTTCCA	TATTTCTGCT	TGATTTACTT	TCTGTATGAG	AACAGCTGTG	TTTTTGATAG	180
GTTTATGGTT	TGCATGAGTT	CATATTTAAA	GTGATCCAGG	CCAATGCATG	GCTATTGCTG	240
TAAATCTTGA	TGTTTATTTC	TGCCTTGTA	AGTTCTATCA	CGGCCTACCT	GGAATTTAAA	300
ATTCACTAGA	CAAATTAATT	GGTCCTCTGC	ACAACTTTTT	TAATAAGTAG	ATTATTTTAC	360
AAAGAAATTT	GAACAAATTT	AATTGAATCT	TTGTTTAGC	TGCTCTCTAA	GAACCTTTCT	420
TAATAAAGCT	CCCAAACACT	CGAG				444

(2) INFORMATION FOR SEQ ID NO:1084:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1084:

GAGTGAGACT	CCCTCTCAAA	GGAAAAAAA	AAGTTTTCTA	GGATCAAAAT	AGGAAAACAG	60
TTGTTTCAGA	ACTCATGATA	TGAGTCATGA	CTACAACCCA	CCATATTCAG	TAAAACCTCA	120
CCTTGTCTCG	TTGTCTGACA	TTAAGTGTC	TACGAGATCC	ATACCTGTGA	AATCAGCTCC	180
TCTGGAATGA	CAGATGCTGG	AATAACTGGC	TGGGGCTGAC	TGCCCCAAAG	CCCAGACCTT	240
CGATCCCGTC	CTGTCCGAAT	AACTCGAG				268

(2) INFORMATION FOR SEQ ID NO:1085:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1085:

```

GAATTCGGCC TTCATGGCCT ACTTTAAGTG AACAAACANCA ACAAAAAAGT TAAGGGTAAG      60
ATGAGGCAGC TTTTCAGTGG AAAATACTTG TCTTGGGGAC AGTATGTCAT GTCCCTATAC      120
CTGGTGCCAT TGATAAGGTT ATTCATTCAA CAATATTTAC TGATCACTGG CATATGCCAA      180
GCACTCTGCC AAGTACTAGG GATATAAACA TTAGAAAGAC AAGTTCCTCC CTTTTCAGTC      240
ACGATCTCGA G                                     251

```

(2) INFORMATION FOR SEQ ID NO:1086:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1086:

```

GAATTCGGCC TTCATGGCCT AGAGCTTCAC GGAGGCAAGA GGGTAATGGA GTGCCTAAAA      60
AAAGCTCTAA AAATAGCAAA TCAGTGCATG GACCCCTCTC TACAAGTGCA GCTTTTATA      120
GAAATTCTGA ACAGATATAT CTATTTTAT GAAAAGGAAA ATGATGCGGT AACCAATTCAG      180
GTTTAAACC AGCTTATCCA AAAGATTCGA GAAGACCTCC CGAATCTTGA ATCCAGTGAA      240
GAAACAGAGC AACTCGAG                                     258

```

(2) INFORMATION FOR SEQ ID NO:1087:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1087:

```

GAATTCGGCC TTCATGGCCT AATAAAAAGA ATTATCAAAG AATTGCAGGG GAAACCCCAT      60
AGAGAAGACT CATTCTTAGA TGAGTATACA ATCCATGGGG GTCTTTAGGA TATTTAACTG      120
ATTTGGGAGA GGTCCGATAA AGAAAAAGGA GCATTAACTT TGAATATGCC TTTAGCTCCA      180
GCCGCCTCTT TAAGAGGAAA TTGTTGGGCA GGTGGGGGAA GGCTAGTCAT GGAACGAAAC      240
TGTAAGCCAG ATCGGGTGTG AGGAGGGGAG GTGATAAAAG GATTATAGGG TGGGAGAGCA      300
CAGGCTGAGG AAGAATTGGG ACCTGGCTCA GCCTGGCAAG GCACAGCCTG GGGAGGAGGG      360
GAGAGGTCCT GTAGAAAAGG AGGATCTCGA G                                     391

```

(2) INFORMATION FOR SEQ ID NO:1088:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1088:

GAATTCGGCC	TTCATGGCCT	AGCCTTCNAA	GTTTGAATGG	CCCTTAGGTT	TTAAGTTATC	60
TATGCAAAGA	TGAANAAGGC	CTTCACATTC	TCAAAGGTGA	CAACTCATAC	CCAGCCATTT	120
GCTTATTTTT	GCCTGCAGAC	CTCCAATGGA	AGTCCGGGCA	CATGGCGGAG	AGCCTCACCA	180
ACATGCCACG	GCACTCCCTC	TACATCATCA	TTGGAGCCCT	CTGCGTGGCC	TTCATCCTTA	240
TGCTGATCAT	CCTGATCGTG	GGGATTGGCC	GCATCAGCCG	CATTGAATAC	CAGGGTTCCT	300
CCAGGCCAGC	CTATGAGGAG	TTCTACAAC	GCCGCAGCAT	CGACAGCGAG	TTCAGCAATG	360
CACTCGAG						368

(2) INFORMATION FOR SEQ ID NO:1089:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 409 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1089:

GAATTCGGCC	TTATGGCCTA	GTTCAATTAA	CTAATACTTG	TATTAAATCA	CTTCTAAATG	60
CTTATTATAC	CCTGTATTAT	AGTATTATAT	TCTGAGTCTT	AAAGGTGCTT	AATGTGAAGA	120
TTCTCTCTCT	ACATATTCAA	CTCTTACTAA	CTTTTGGCTT	TAGGTAGAAA	TCAGTTAGTG	180
TATTATATGA	TAAAATAGGA	AACTATTTC	CTAGGGGTAT	AGGTATTCAG	TAGGGAGCTT	240
TGGAGTCTCA	ATGAGCTTCT	TAAAGAAGCA	TTTTTAATGG	TAGGTTTTAG	GGAGAGTTTT	300
TGTAGTAAGA	TAAAGTAGAT	GAGAAAGTGT	TGCCTCTAAA	CAATCAACAA	GCTGGGAATG	360
GGGTGCAGAA	TGAGGAGAAC	CCTAAGCAAT	AGGCAATAAG	AAGCTCGAG		409

(2) INFORMATION FOR SEQ ID NO:1090:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 359 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1090:

GAATTCGGCC	TTGGCCTAGT	GAGAGAGCGT	CAAAAAA	ACTTCCATCTCAG	CCAACCACTG	60
ATACTAGTAC	TGACAAAGAA	AGAACTTCAG	AGGACATGGC	TGATAAAGAA	AAATCTACAG	120
CTGACTCTGG	AGGTGAAGGA	CTGGAAACAG	CCCCAAAGTC	TGAAGAGTTC	AGCGACCTCC	180
CCTGTCCAGT	CGAAGAAAAT	AAAAATTACA	CAAAAGAGCA	TAATAATTTA	ATTCTGCTAA	240
ATAAGGATGT	TCAACAGGAA	AGCAGTGAGC	AAAAAATAA	ATCAACAGAC	AAAGGTGAAA	300
AGAAGCCAGA	CAGCAATGAG	AAAGGAGAAA	GAAAGAAAGA	AAAGAAGGAA	AAGCTCGAG	359

(2) INFORMATION FOR SEQ ID NO:1091:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 280 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1091:

GAATTCGGCC	TTCATGGCCT	ACATGTTTCAT	TCTAAGAAAC	TTAACTCCAT	TTTAAAGCTT	60
TAAGATTCCC	CCGATCCCAA	ATAACCTAAC	ACACCAAAAG	CCTTGCCATT	TCACACATGC	120
TGTTCTTTG	CTTAGAACCT	TTTCAATGTC	TAGCTCACTC	TGTTTGGGAC	TTCTTTTTTC	180
TTTCTTTTT	TTTGAGACAG	GGTCTGGCTC	TGTCATCCAG	GCTGGAGTGC	AATGGGGCAA	240
TTTCGGCTCA	CTGCAACCTC	CGCCCTTCCA	GGCTCAAGCG			280

(2) INFORMATION FOR SEQ ID NO:1092:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 443 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1092:

GGAAAATTGA	GAAAACCATG	AAAGAAAAAG	AAGAACTGTT	AAAGTTAATT	GCCGTTCTGG	60
AAAAAGAAAC	AGCACAACTT	CGAGAACAAG	TTGGGAGAAT	GGAAAGAGAA	CTTAACCATG	120
AGAAAGAAAG	ATGTGACCAA	CTGCAAGCAG	AACAAAAGGG	TCTTACTGAA	GTAACACAAA	180
GCTTAAAAAT	GGAAAATGAA	GAGTTTAAAG	AGAGGTTTCA	TGATGCTACA	TCCAAAGCCC	240
ATCAGCTTGA	GGAAGATATT	GTGTCAGTAA	CACATAAAGC	AATTGAAAAA	GAAACCGAAT	300
TAGACAGTTT	AAAGGACAAA	CTCAAGAAGG	CACAACATGA	AAGAGAACAA	CTTGAATGTC	360
AGTTGAAGAC	AGAGAAGGAT	GAAAAGGAAC	TTTATAAGGT	ACATTTGAAG	AATACAGAAA	420
TAGAAAATAC	CAAGCTTCTC	GAG				443

(2) INFORMATION FOR SEQ ID NO:1093:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 256 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1093:

GAATTCGGCC	TTCATGGCCT	ACCTCCATTG	TATATTAACA	TTTATCATAA	TTATTATTTG	60
CTCATTCAAA	AAATATTGCT	CTGATATGGT	ATTGAATATT	CCTCACATAG	GAAAATATGA	120
ACAGTTTATT	TGCCACCCAG	ATGGTTTGGA	AGCCTATACC	CTCCAAGACA	TTGAGAAAAG	180
AAAAATCTTT	CTCTCAGGAG	AGAGAATGAG	TGCCAAGCAA	TGGGAGAAGC	CCCTTAAAAA	240
ACCATCAGAT	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:1094:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 454 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1094:

```
GAATTCGGCC TTCATGGCCT AAGCTGTTAG TGATTCTGAC ACCCTTGGAC CTCCAGGAGT    60
AGCTCCTCCT GCCACGAGAG GACTCTGGCT TTTCTAATAA GGAAGGTTCT GGCCAATCAG    120
TCCAAGAAAG GCCCGGATTC TCTTCCAAGG TGTTGTCTCT GCAGAAATGT TCCTCAGGGT    180
GGAAGGTGCT GCTGCAGCAA GGGATGTCCC CTGAGTTTTC AGGTATGTAG TCTGTGGCTG    240
CAGCAGGTGA ACACTCCTCA CACTCCCAT TCTTACTGTT AGATCTAAGA GAGGAGCAGT    300
CCCTGTGGGT TCCGTGGGAT CCGCATGTAG CACACAGAAT GAGGCACCAC CTCCTTTCAT    360
CCTCAAAGCT GTCTCTGCCT TGTTCATACA GACAGATGGG GGCATCACAG TGCTGATAGC    420
GCTGATATAA GTCTGAGAAA GCCCCTGGCT CGAG                                454
```

(2) INFORMATION FOR SEQ ID NO:1095:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1095:

```
GAATTCGGCC TTCATGGCCT AGTGATCTCA TCTCTCCGTC CATGGGCGAA AAAACAGCCA    60
TCACCAGGCC ATTCACGCTT TGTGCTTTTG TTAGCAGAGC CCAGGCAGCC CTGCAGCCCA    120
CATCTAGGGT ACAAACGGAA CGGCGGCGTT TTCCTTGAT CATTAGAGG AAATTTTGA    180
GCTGAACAGT ATTTTTTTC TCCCTCTCTC TCTCTCTGAA ATATTGCTGA GATTAAAGG    240
AGGACGAAGA CAACAGATTC ATAGCTGGGT CTTGCTGTTT TCCTGACGCT GACCACAGCG    300
GATCTAGTTT CTCTGCAGAA GACAGCAAGA TGCCCCAGGG AATGTTGTG AAAAAGGATG    360
ACTGGATGGG AAGCAAGCTG AAGAAAAAGA AGGAAAGAAA GAGAGAAATC AGTAAATCAC    420
CACACAAGAG GTGGAGAAGA GGACTCGAG                                449
```

(2) INFORMATION FOR SEQ ID NO:1096:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1096:

```
GACTGGCCGC AAGGGACGGG TTGTGAGCAA TGATGATGGA AGCATATCTT ATGAGTCAAG    60
ATCTGAACTT GATGTGCCTG TGGAAATACT AAACATCACA GAAAAACAAC GATTTATGGA    120
TGGAGATAAG AATATTGCTA TCATCTCAGA AGCTGCCATG CTCGAG                                166
```

(2) INFORMATION FOR SEQ ID NO:1097:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1097:

```

GAATTCGGCC TTCATGGCCT ACATTATTTA CACCTGTCCC AGACTTTGAT TCAGGAACTA      60
ATGCTGCAAA GCAAGGACTA TGATGGAAAA TGCTCACTGC AAGAATGGTA GCTGCAGCAA      120
GATCAAGATC CCAGAAAGCA GTGGCCAAGG CACTCACTGT AGACTTTAGT GCCTGCAGCA      180
TCTGGTGCAA GCTACACTGT CTACGCCCAG GAACACAGCA GCAGCATCCG GCCTGGGCCA      240
ATTCTGTGTA AGATTTGATG CGCTGTCCCT GGCTGCAGTG CCTGCAGACA TCTCTCTCTA      300
GCCCTTCTAA CAATTTCACA GCAACTCAAC ATCTTTAAAA ATTTATTAGC CAACCAAAT      360
CAGCTTCTGT GGCATGCAAG TAAAAACCA GGCTGATATG TCTGAATACA GAAGATTAT      420
ATTAGTTCCT TAGAGTCAAT AATCCATACA GACTCTATTC TAGCTTCTTT GTGAAGTGGG      480
TAAGAATTCC TCTGCCTCGA G                                     501

```

(2) INFORMATION FOR SEQ ID NO:1098:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1098:

```

GAATTCGGCC TTCATGGCCT ACTTCAAAAA CATATATTAA TATTTTGTGA CCACGTAAGT      60
TCATCAGAAG CCTGACTTTA ATCTCTGATT TATTATATTT GAACACTGTG AAGAAGCAGT      120
TTAACACTGA ACGAAAGTGT CGTAATGCAG CTTTCAAAGT GGCCATTAAA GACAGATCTC      180
TGCTTTTCTA TTAGTACATT TTCTAAGATG ACTATCATTG CCATTGTAGT CAGCTTGTG      240
TACCTTTATA GAGATTCCAG TATAAACCCA GAAACGCTCG AG                                     282

```

(2) INFORMATION FOR SEQ ID NO:1099:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1099:

```

GAATTCGGCC TTCATGGCCT AGGAACTTT TCAAAGAAGT AGTCCACGAG AACTACCTTG      60
AAAGAGCAAA ACCAGCCAGG TGCAGTGGCT CACGCCATA ATCCCAGCAC TCTGGGAGGC      120
CCAGTGGGT GGATCTCGTG AGGTCAGGAG TTCAAGACCA GCTTGCCAA CATGGTGAAA      180
CCCCATCTCT GCTGAAAATA CAAAAGTTAG CTGAAAATAC AAAAGTGCA CATGCCTGTA      240
ATGCCAGCTA CCGGAAAGG CTCGAG                                     266

```

(2) INFORMATION FOR SEQ ID NO:1100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1100:

```

CTCGAGCGTA TCCAGAACT TAAAGTATAA TAATAATAAT AATAATAATA ATAATAATAA    60
TAATAAAACC TTCCAACAAG CTTCTTTTCC ACCACAGGAA ATCCTGTTGG GAGTTCCCCC    120
TGAACCAAAA AAAAAAAG ATAGAGTATA AACATACAC TTTTCAGGAA TGCTTATTGG    180
GTAATGTAAG ATAACACCTC AAAATGAAAC TCAGAATTTT ATTTTATTTT ATTTTGTGAG    240
ATGGAGTCTC ACCTAGGCTG GAGTTCAGTG TGGTAATCTT GGCTCACTGT AGGCCATGAA    300
GGCCGAATTC

```

(2) INFORMATION FOR SEQ ID NO:1101:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 367 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1101:

```

GCGATTGAAT TCTAGACCTG CCTCGAGTGT ACCTCATTCT GCCATCTCTG ATATTATGTC    60
ATCTGATCAA GAACTTACT CTTGTAAACC TCATGGACGG ACTCCACTTA CCTCAGCTGA    120
TGAGCATGTA CATTCCAAAC TGGAGGAAG TAAAGTAACG AAATCTAAGA CTCTCCGGT    180
GGTATCTGGT TCATCTAGTA AATCAACCAC CTTCCAAGG CCACGACCTA CCAGGACTTC    240
CCTCTTGCGC AGAGCACGAC TTGGTGAAGC TTCAGACAGT GAACTTGCTG ATGCTGACAA    300
AGCATCTGTT GCTTCTGAAG TATCCACAAC AAGTTCTACA TCAAAACCTC CCACAGGAAG    360
GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1102:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 368 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1102:

```

GAATTCGGCC TTCATGGCCT AAGAAAGCAA GAAAGCACGA AAGCAATCAA GCAAGAAAGC    60
AAGCAGGAAA GAAACAAAAG AAAGAAAGAA NGCGAGAAAA CAAGAAAGCA CGAAAGCAAG    120
CAAGCAAGAA AGCAAGCAAG AAAGAAACAA AAGAAAGAAA GAAAGAAAGN AAACAGGAAA    180
GCAAGAAAGC ACGAAAGCAA GCNAGCAAGC AAGAAAGCAA GCAAGAAAGA AACAAAAGAA    240
AGAAAGAAAG AAAGAAAGAA AAAGAAAACA GGAAAGCAAG AAAGCACGAA AGCAAGCAAG    300
CAAGCAAGAA AGCAAGCATG AAAGAAACGA AAGAAAGAAA GAAAGCAAGA AAACGGGAAA    360
GACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1103:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 328 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1103:


```

GAATTCGGCC TTCTGGCCTA GAAACCCGTG ACACACACAC ACACACCTGC ATAGATTTTT    60
CCCAAGCACA CGATATGCAC GTGGATACAC AGACTTACAA GCACAGGGCC ACGTGCAGAC    120
AGACACAGAC CCTGTCTGCA CCACAAACAT ACCACACACA GCCACACACA CAGAAGCCAA    180
ACATCCTCGC ATAGGTGGAT ACAAGCACAG ACTCACATAC ACATATGCGA TACACATATG    240
GATACATACA CAGAGTACCC CCACAAACAC ACAGACACAC ACGGGCAGAG ACAGACAGAG    300
ACAGGCACAG ACCCCCCCCC ACCTCGAG                                     328

```

(2) INFORMATION FOR SEQ ID NO:1104:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 246 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1104:

```

GAAAAAACT GAGTTAATGG CCATGACTAG ATGGGAGGTC AGATTCGCCG TTATATCCTC    60
TCTGTTTTGC AGTTTAGACA CAACTGACCA GCATTGTTAA AATGGAGATC ATACGGCTGG    120
TAGAACAGAC TCTTTGTGGC CCAAATTAG CAAATTATAA ATAGAATCTA AAGCCATCCC    180
AGGCAAGGGT TAAGTTATGC ACCCCTACAC TTAAAGAATA AACTATGTTG GCCGGGCCAA    240
CTCGAG                                     246

```

(2) INFORMATION FOR SEQ ID NO:1105:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 298 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1105:

```

GAATTCGGCC TTCATGGCCT ACGATCAGAA AGAAAACACA GATCTCGAAG TCGGGATCGA    60
AGAAGATCAA AAAGCCGGGA TCGAAAGTCA TATAAGCACA GGAGCAAAAG TCGGGACAGA    120
GAACAAGATA GAAAATCCAA GGAGAAAGAA AAGAGGGGAT CTGATGATAA AAAAAGTAGA    180
GAAAGAAGGC GGAGCAGAAG TAGAGATCGA CGAAGAAGCA GAAGCCATGA TCGATCAGAA    240
AGAAAACACA GATCTCGAAG TCGGGATCGA AGAAGATCAA AAAGCCGGGA AGCTCGAG    298

```

(2) INFORMATION FOR SEQ ID NO:1106:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 211 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1106:

```

GAATTCGGCC AAAGAGGCCT AGGGATGGAT GGTTCACTG CTAGAATTC GATGCAGGAC    60
TTCTTCAAAA TTGAGTGGAT GATGCCTTGC AGAGCCTGAA AGCCGTCATT CACGGGAAAC    120
ACATGATCCT TACTGTCCGC AATCCGGGCC AGCTGTGTCT CATTGAAATC TTTCACACCA    180
ACACAGTAAA CAATTGCACC AAGATCTCGA G                                     211

```

(2) INFORMATION FOR SEQ ID NO:1107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1107:

GAATTCGGCC AAAGAGGCCT ACCTGCTTGA ATTGGGGCCC CTTGTGAAGC TGCTGCCGCA	60
TCTCTTCCAT TCGCTGCTTC CGGTACTGCT GCAGAACTC TTCATCATCT TGGTCCTCAT	120
TCATTATGGC AACTCCTTC AGAGTCATCT TCCCACTGAT CTTCTCCTGG AGGTCTTTCT	180
GTTTCTGTTG CTCCTCCTCT TCATCCAGAT GGGACCTGCA AGTCATTGAC AGCTTCTTGA	240
TCAGCCTTTC CATCTCCCGG CAACTCGAG	269

(2) INFORMATION FOR SEQ ID NO:1108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1108:

GAATTCGGCC AAAGAGGCCT ATGAAAATTG ACTGCAATTA GTAAAGTTGG TATAACGTAC	60
GTTCCCAAGT GTGCTATTTA GAATTATGAT AGTATTATGC TCCTACTTTT CTTTGATATT	120
GAGTAGTCTC GAG	133

(2) INFORMATION FOR SEQ ID NO:1109:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1109:

GAATTCGGCC AAAGAGGCCT AGCTTTTCT AATCATAAAT TATATGACCT TTACAGAAAA	60
TTTAGAAAAT ACAGAAAAAC TGAAAAGTTA CACATGGTAC AACTCACAAC CACAATCCTC	120
GAG	123

(2) INFORMATION FOR SEQ ID NO:1110:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1110:

GAATTCGGCC AAAGAGGCCT AGTGTTCAG ATCCTACGGC TTATGAGGAT TTTCCGAATT	60
CTAAAGCTTG CCCGGCACTC GGTAGGACTT CCGTCTCTAG GTGCCACACT GAGACACAGC	120
TACCATGAAG TTGGGCTTCT GCTTCTCTTC CTCTCTGTGG GCATTTCAT TTTCTCTGTG	180
CTTATCTACT CCGTGGAGAA AGATGACCAC ACATCCAGCC TCACCAGCAT CCCCTCGAG	240

(2) INFORMATION FOR SEQ ID NO:1111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1111:

GAATTCGGCC AAAGAGGCCT AGGTGGGGAG GGGAGGGGAC AGGAGAAATG AAATACCTTC	60
ACCGAGAACT CAGCAGCTGC CACCGCAGCT GCCTCCTCAG GATCCGGTCG TCGGGGATAG	120
GGAAAGGGAGG GGAAAGGGGA ACGGAAAACA AAAAAAGGG GGAGGGAAGG GGGAGGAAGG	180
AGTCGGGGAC GGCTCAAAC TCAGCTCAGA GGAGTCGCTG CTGCAGCCGC CACTCGGTAC	240
CCGCTGCTAG GCCTCTTTGC CGAG	264

(2) INFORMATION FOR SEQ ID NO:1112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1112:

GAATTCGGCC AAAGAGGCCT AAATATTAGA AAATGTATAT TATAGAACAT GATATATATT	60
TACATTATC TCTGTATTCT CTCAGCTGTT GTTAGAAGGA CAGAATGTTA AACTTTATCT	120
TAATTAGTAT ACTAGAAAGG GCAGTATAAT ACTGTTTTAA AGTGAAGGCA TGACTGAAAC	180
TAAATATTT CATAAGGCTT AGCTAGAGGC AGAGTAACGT GTTTTTGTTC ATTGGGCTTC	240
CTTGACTTA GTTTTTTCAT TTAATAATC AAACCAACAC TTTTAAAAA ATAATTGAGA	300
TGAGACTGAG CCATATCTGC AGTAAGAGAA ATATTTCTTA ATGTTTTGGT TACTTATGAT	360
AGAGTACTTT TCTTGATACT GTTAACCTTG TGCTTTTTAA AAAAAGTGAT TCTCTAACAG	420
ACCTCTTAAA TTGTGACATG AAGGTATGTA ATTAGATTTC AGAAATTGGT TTATTAGTGA	480
GGAATTTTAA TCAATAAATG TCATGGGGCG GCGCTCGAG	519

(2) INFORMATION FOR SEQ ID NO:1113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1113:

```

GGCCACCTA GTTGGTATCC CAAATTCACA CATTCAAAAG CAAAGCCATT TCTCACCTTC      60
CTCCAAAATA CTTGTAATTC CTAATATCCT GACTCCAATC CATTCTTTAT TTTCTATTCC      120
CAAGGCCCTT CACAGAATCG AAACCTTTGT TATGAGCTCT TACATGGTGT ATCATCAATA      180
TGTTCACTAG ACAGGAGTTT TTTTAAAAA AAATCCTCAT CATTCTCTCT CAATTCAAGA      240
GCTCTGATGG CTTCCAGTCT ATACAAGATA TATTAAGGCT CAACTTACAG TTCCAGTCTC      300
ACCTGCCCCA CCTCCACCTT CCCAAACCTT CTGTATTCTA GCCAGAGCAT ACCTGCATTTC      360
CCTTAGCTCA ACATGTGTCC TTGCTCACAC TGTCCCTTTG GTTGACCTAG CTTCAATTCC      420
TTCCTCATGT GCAGTTATGT GTCTACTAAG CAGCAATGTG AAATGTCTTT ATTGTAGGTC      480
TGTCAAAAGC TAAAGTCATG GCCCGGTGCA GTGGCTTGGG CCTGTAATCC CAGCACTTTG      540
GTAGCCTCT TTGCCGAAT TC

```

(2) INFORMATION FOR SEQ ID NO:1114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1114:

```

GAATTCGGCC AAAGAGGCCT ATTATTGCTA TCGCCCTCCT TTCCCTTATT GCCTCCCAGG      60
CAAGCAGCTG GTCAGTCTTT GCTCAGTGTC CAGTTTCCAA AGCCTAGACA ACCTTTCTGT      120
AGCCTAAAAC GAATGGTCTT TGCTCCAGAT AACTCTCTTT CCTTGAGCTG TTGTGAGCTT      180
TGAAGTAGGT GGCTTGAGCT AGAGATAAAA CAGAATCTTC TGGGTAGTCC CCTGTTGATT      240
ATCTTCAGCC CAGGCTTTTG CTAGATGGAA TGGAAAAGCA ACTTCATTG ACACAAAGCT      300
TCTAAAGCAG GTAAATTGTC GGGGGAGAGA GTTAGCATGT ATGAATGTAA GGATGAGGGA      360
AGCGAAGCAA GAGGAACCTC TCGCCATGAT CAGACATACA GCTGCCTACC TAATGAGGAC      420
TTCAAGCCCC CTCAG

```

(2) INFORMATION FOR SEQ ID NO:1115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1115:

```

GAATTCGGCC AAAGAGGCCT AGTGCCTAGA TTGATCGGTA TAAGGCTCAC TCTCCGCCCC      60
CCCAAAGTGG TTGATCGTTG GAACGAGAAA AGGGCCATGT TCGGAGTGTA TGACAACATC      120
GGGATCCTGG GAAACTTTGA AAAGCACCCC AAAGAACTGA TCAGGGGGCC CATATGGCTT      180
CGAGGTTGGA AAGGGAATGA ATTGCAACGT TGTATCCGAA AGAGGAAAAT GGTGGAAGT      240
AGAATGTTCT CTGATGACCT GCACAACCTT AATAAACGCA TCCGCTATCT CTACAAACAC      300
TTTAACCGAC ATGGGAAGTT TCGATAGAAG AGAAAGCTGA GAACTTCGGA AAAGGCTCAT      360
CTGTACCCTT GGAGAAGGGA AACTGTACTT TTCCCTGTGA GGAAACGGCT TTGTATTTTC      420
TCTGTAATAA AATGGGGCTT CTTTGGAATT TGATAAGCCT AGGCCTCTTT GGCCGAA      477

```

(2) INFORMATION FOR SEQ ID NO:1116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 620 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1116:

```
GAATTCGGCC AAAGAGGCCT AAGATGAAGC CCAACATCAT CTTGTACTT TCCCTGCTCC      60
TCATCTTGGG GAAGCAAGCA GCTGTGATGG GACAAAAAGG TGGATCAAAA GGCCGATTAC      120
CAAGTGAATT TTCCAATTT CCACACGGAC AAAAGGGCCA GCACTATTCT GGACAAAAAG      180
GCAAGCAACA AACTGAATCC AAAGGCAGTT TTTCTATTCA ATACACATAT CATGTAGATG      240
CCAATGATCA TGACCAGTCC CGAAAAAGTC AGCAATATGA TTTGAATGCC CTACATAAGA      300
CGACAAAATC ACAACGACAT CTAGGTGGAA GTCAACAAC TCTCCATAAT AAACAAGAAG      360
GCAGAGACCA TGATAAATCA AAAGGTCATT TTCACAGGGT AGTTATACAC CATAAAGGAG      420
GCAAAGCTCA TCGTGGGACA CAAATCCTT CTCAAGATCA GGGGAATAGC CCATCTGGAA      480
AGGGAATATC CAGTCAATAT TCAAACACAG AAGAAAGGCT GTGGGTTCAT GGAATAAGTA      540
AAGAACAAC TTCCGTCTCT GGTGCACAAA AAGGTAGAAA ACAAGGCGGA TCCCAAAGCA      600
GTTATGTTCT CAAACTGAA
```

(2) INFORMATION FOR SEQ ID NO:1117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1117:

```
GAATTCGGCC AAAGAGGCCT AGACCTGCCA CATTGTGTTAA CATTTTCCCA TTTCTAAACC      60
ATCCTTAAAG AAAATCATAT ATGGGGTCAC ACCATCCTCA CGGTAGTCCA ATAGAGCAAC      120
CATGCCATCT GGATTCATGT TTTACCAAAA CCCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:1118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1118:

```
GCACTGCTTC TGTTAAAGTC ACTGACCTTA ACAGTTTGA ACTAGATAAA GGAAATTTG      60
TGGTTGACCA AATGTGTGAA ATAGGTAAGC CAGAACCATT GAATGAGGAG GAAGCAAGGG      120
GTGTGGTTGA GAATTATAAT GATGAAGAAG TGTCAATTAG AGTTGGTGGA AATACACAGC      180
CAAGTAAAGT TTTGAACAAA AAAAATGTAG AAGCTATTGG ACTTCTTGGA GGACAAAAGA      240
GCAAAGCAGA TTATGAGCTA TACAACAAAG CCTCTAATCC TGATAAGGTT GCTAGTACAG      300
CGTTTGCTGA AAATAGAAAT TCTGAGACTA GTGATACTAC TGGGACCCAT GAATCTGATA      360
GAAACAAGGA ATCCAGTGAC CAAACAGGCA TTAATATTAG TGGACTCGAG      410
```

(2) INFORMATION FOR SEQ ID NO:1119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1119:

```

GAATTCGGCC TTCATGGCCT AGTTGCCCTA ATTTGCAGCC GAACTTGGAA GCCACTGTAT      60
CCAATGGACC TTTTCTGCAG CTTTCTTCCC AGTCTCTTAG CCATAATGTT TTTATGTCCA      120
CCAGTCCTGC ACTTCATGGG TTATCATGTA CAGCAGCAAC TCCGAAGATA GCAAAATTGA      180
ATAGAAAACG ATCCAGATCA GAGAGTGACA GTGAGAAAGT TCAGCCACTT CCAATTTCTA      240
CCATTATCCG AGGCCCAACA CTGGGGGCAT CTGCTCCTGT GACAGTGAAA CGGGAGAGCA      300
AAATTTCTCT TCAACCTATA GCAACTGTTC CCAATGGAGG CACAACACCT AAAATCAGCA      360
AAACTGTACT TTTATCTACT AAAAGCATGA AAAAGAGTCA TGAACATGGA TCCAAGAAAT      420
CTCACTCTAA AACCAAGCCA GGTATCTCG AG                                         452

```

(2) INFORMATION FOR SEQ ID NO:1120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1120:

```

GAATTCGGCC TTCATGGCCT ACATGAATCT ACTTCTGATC CTTACCTTTG TTGAGCTGCTC      60
TGTTGTGCTCC CCCTTTGATG ATGATGACAA GATCGTTGGG GGCTACATCT GTGAGGAGAA      120
TTCTGTCCCC TACCAGGTGT CCTTGAATTC TGGCTACCAC TTCTGCGGTG GCTCCCTCAT      180
CAGCGAACAG TGGGTGGTGT CAGCAGGTCA CTGCTACAAG TCCCGCATCC AGGTGAGACT      240
GGGAGAGCAC AACATCGAAG TCCTGGAGGG GAATGAACAG TTCATCAATG CAGCCAAGAT      300
CATCCGCCAC CCCAAATACA ACAGCCGGAC TCTGGACAAT GACATCCTGC TGATCAAGCT      360
CTCCTCACCT GCCGTCAATCA ATTCCCGCGT GTCCGCCATC TCTCTGCCCA CTGCCCCTCC      420
AGCTGTCTGGC ACCGAGTCCC TCATCTCCGG CTGGGGCAAC ACTCTGAGTT CTGGTGCCGA      480
CTACCCAGAC GAGCTGCAGT GCCTGGATGC TCCTGTGCTG AGCCAGGCTG AGTGTGAAGC      540
CTCCTACCCT GGAAAGATTA CCAACAACAT GTTCTGTGTG GGCTTCCTCG AG                                         592

```

(2) INFORMATION FOR SEQ ID NO:1121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1121:

```

GAATTCGGCT TCATGGCCTA AATAATTTTT ATTCAGAATA ATAAATCACT CTTTATCATA      60
GTATCTTCTC TTCCCTCTTC CCCTTTAGTT TGGATAGCCT AACTCTGAGA AGTTAACCCCT      120
TAAACAGTTT TCTGGAAGAG ACTGAATTTT TGGGTCCTTG CAGCTGTGAT GGTTTCAGAG      180
CTCAGACTGA TCAGGCATCA AGCTACCCTC AAGAGTTTCT GGGCTGGATG TTTCAGAACA      240
ACATCTACAC CAGTAAAGTG TAATAGGTCA GTTTCAAAAC GACCAAAAGA CCCCACCACT      300
CGAG                                         304

```

(2) INFORMATION FOR SEQ ID NO:1122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1122:

```
GAATTCGGCC TTCATGGCCT AGTGAACTC CATT TTTT TTA CTGCTATTAC TCTGTGTTTT    60
CAGTTTTATG ATTTGGAATA CCATGATGGG AACATCTATA CTAAGCATTC CTTGGGGCAT    120
AAAACAGGCT GGATTTACTA CTGGAATGTG TGTCATCATA CTGATGGGCC TTTTAACACT    180
TTATTGCTGC TACAGAGTAG TGAAATCACG GACTATGATG TTTTCGTTGG ATACCACTAG    240
CTGGGAATAT CCAGATGTCT GCAGACATTA TTTCGGCTCC TTTGGGCAGT GGTGAGTCT    300
CCTTTCTCC TTGGTGTCTC TCATTGGAGC AATGATAGTT TATTGGGTGC TTATGTCAA    360
TTTCTTTTTT AATACTGGTA ACCTCGAG                                     388
```

(2) INFORMATION FOR SEQ ID NO:1123:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 478 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1123:

```
AGCAATTCCA TAAACACATC CTGGTGTCT CACAGCCAAG GTTTT TAGGT TGCTATACCA    60
ATGGCTTATT AAATGAAAAT GGCATAAAA GTTCTTTGAG ATTCTTTATA CTCTCTGCCT    120
TCAGCAATCA ATTCCATTCA TACATCAGCA CTCTGCTGGT TCTGTTTGAA ATATGTTCTG    180
TATTTAAAC TCAAATCTTG TTGGATCTCT GCAGGGCTTG TGACCAATGA AGTCATATTT    240
GTTGATGGTT GACAAAGCTT GCTTCACTCC ATCAGAGAAT GACTATCAAT TTTT TTTTAA    300
CTGTCCTATC ACGTCCTCTC CTGTCACCCA TTTTGAAGAG TGGCAGAACT TGAAGTTCAA    360
CTTCCTCTGT AAATATCCAA GTATAAGCC CAGGAACCTC TAGAATAACC CAGATGCGCT    420
TTAATTTTTT TTAATATGTT TTGATCACAG AACTCCTTAG GCCTCTTTGG CCGAATTC    478
```

(2) INFORMATION FOR SEQ ID NO:1124:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 450 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1124:

```
GAATTCGGCC AAAGAGGCCT AGGAATTCAG TGCAAACACT ACTTTGAACT GTGGTTCTTA    60
ATTTCCACGA AAGTTTTTCT CTGTTCTTCT ATTATGGCAC TTTCAGGGT CTCCCTTGTA    120
CATTTTAGTT TTTGTGTTTT TCAGTAAGTG CCTTGAGATC AGGGACCGGT TCTACTGGTC    180
TGTTCCAACC ATAGTTCCTT AAACATTGTG TTCCATTAAAT ATTGGGTGAA TTGAAATGAA    240
TTTATAGGAA GCTCCTTAAC CTGGGGTCCT CAGACCTCTA TGGGGTCCAT GGACAGAATT    300
TGAAGTGGGA AGGATATATG AACTTGGATG GAGGAAAATT ACTTATTTGT TTTTACCAA    360
CCTCTCCTTT GTAATTTAGC CATTGTTTCA ATTATAATGT AGGCAAATAA AAATAAAAAAT    420
AAAAATAAAA TAAAGGCAGC TTAGGCCTCT                                     450
```

(2) INFORMATION FOR SEQ ID NO:1125:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 550 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1125:

GAATTCGGCC	AAAGAGGCCT	ATCCTTAGTG	GATTCCGACT	TCCATGGCCA	CCGTCCTGCT	60
GTCTATATCA	ACCAACACCT	TTTCTGGGGT	CTGATGAGCG	TCGGCATCGG	GCGCCTTAAC	120
CCGGCGTTTC	GTTTCATCCG	CAGCGCCAGT	TCTGCTTACC	AAAAGTGGCC	CACTAGGCAC	180
TCGCATTCCA	CGCCCGGCTC	CAGCGCCAGC	AGCCGGGCTT	CTTACCCATT	TAAAGTTTGA	240
GAATAGGTTG	AGATCGTTTC	GGCCCCAAGA	CCTCTAATCA	TTCGCTTTAC	CGGATAAAAC	300
TGCGTGGCGG	GGGTGCGTCG	GGTCTGCGAG	AGCGCCAGCT	ATCCTGAGGG	AAACTTCGGA	360
GGGAACCAGC	TACTAGATGG	TTGATTAGT	CTTTCGCCCC	TATACCCAGG	TCGGACGACC	420
GATTTCACG	TCAGGACCGC	TACGGACCTC	CACCAGAGTT	TCCTCTGGCT	TCGCCCTGCC	480
CAGGCATAGT	TCACCATCTT	TCGGGTCCTA	ACACGTGCGC	TCGTGCTCCA	CCTCCCCGGC	540
GCGGCGGGCG						550

(2) INFORMATION FOR SEQ ID NO:1126:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1126:

GAATTCGGCC	AAAGAGGCCT	AGTTTGACAG	AAGAAGGCAT	GGGATAGTCT	GAGAACAAAC	60
AGGCACTAAA	TGGAGCAACA	TCATCTTGAG	GTGTCAAGCA	GGAGCTGGGA	GACCAGCAGA	120
GACTCCCAAG	GCCTTGCTGC	TGTTGGTCTG	CAGGCAGCTC	TGTAGGGCAG	GCTGTTGTCA	180
TTTTGCAAGT	GAGCAAGCAG	AAGCCCAGGC	AGGTGAGTCA	TTCACCTCCAC	AGTTCCATAAC	240
TTGGATTGTG	GGTTAGTTAC	ACCTGACTCC	AAAACCTGAC	TTTTTACTAC	TCAGCTATAC	300
TGGCTCTCA	AGAAAGGCTA	GGCCCTAATT	TCTAGACTCT	CTTTTACCAA	TAATACCTGT	360
TGCCACGAAG	TAGGCCTCTT	T				381

(2) INFORMATION FOR SEQ ID NO:1127:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1127:

GAATTCGGCC	AAAGAGGCCT	ACTCTCAAGG	TGGGCATATG	CAAAACATAA	TCTCTAAATT	60
CTTCAATACT	AAGAAATACC	TTTGTCTTAC	CCCTAAAATC	AAATGCCATT	TTGGCTGGAT	120
ATAGGATTCT	AGGATTAAAG	CCTTTTTC	GCAGAACTTT	GAAGACATTG	CTCCATTTAC	180
TTCTAGCATC	CAGTGTGTCC	AGTGATAAGT	CTGCTGTCAA	CCTGATTCTT	GTTCTTGGT	240
AGGTAATTTC	TCTTCTCTCT	CTAGAAGCCC	TTATTATTTT	CTCTTTATCA	CTAGAATTCC	300
AAAATTTTAC	CAAGATGTGT	CTAGGAGTCA	GTCTCTTTTC	ATCAATTTTA	CTAGGTACTC	360

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361

(2) INFORMATION FOR SEQ ID NO:1128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1128:

GCAGCCAATG GCGGCGCCAG AGGGGAAACN GAGCCTTGCT NACGGGCCCCA ACGCTGGGGA	60
GCAGCCAGGC CAGGTGGCGG GCGCAGACTT CGAGAGCGAG GACGAGGGCG AGGAATTTGA	120
TGACTGGGAG GACGACTACG ACTATCCCGA AGAGGAGCAG CTCAGTGGTG CCGGCTACAG	180
AGTATCAGCC GCTCTTGAAG AAGCCGACAA GATGTTTCTG AGAACAAGAG AACCAGCCCT	240
GGATGGCGGG TTTCAGATGC ATTATGAGAA GACCCCGTTT GATCAGTTAG CTTTATCGA	300
AGAGCTTTTT TCACTGATGG TTGTCAATCG TCTGACCGAA GAACCCGGCT GCTCTCGAG	359

(2) INFORMATION FOR SEQ ID NO:1129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1129:

GATGGCACCC TCCTCAGAAA GCAGCGTCCC CTCTCACAGT ATGTCCTCCC GACGGGACAC	60
AGACTCGGAT ACCCAGGATG CCAATGACTC AAGCTGTAAG TCATCTGAGA GGAGCCTCCC	120
GGACTGTACC CCTCACCCCA ACTCCATCAG CATCGATGCC GGTCCCCGGC AGGCCCCCAA	180
GATTGCCCAG ATCAAGCGCA ACCTCTCCTA TGGAGACAAC AGCGACCCTG CCCTAGAGGC	240
GTCTCGCTG CCCCCACCCG ACCCCTGGCT CGAG	274

(2) INFORMATION FOR SEQ ID NO:1130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1130:

GGCTTTCCAC CTTCCCTGCG GAGATGAGGG TGGTGGCCTC CCTTTTGTG ACCCTTCCAA	60
GGGTCATGCT CGTCTGCTGG CTTTCTCCA AGATGCTGCC AAAAATGATC TTAA1AAGAC	120
ACAAGCCTGG TTGTGATATT TTCTGATTC AAGTGTCTCT GTGGTTCTTG GTTGCCCTCA	180
GGAGAGAGTT CAAGCCTCTT ATGGTGGTTT GTGAGGCCAG GCCTGAACTA GCCCCATCGT	240
CTGTTCAATC ACCACCCAG TATCCCTGCT GCAGGTTTTT AAAGATCTCA TGTCCCTGAT	300
TGCCTGTCAC TGTGTCTGAC TCGAG	325

(2) INFORMATION FOR SEQ ID NO:1131:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 639 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1131:

```
CTCGAGGATC CCCGGGGACG GGACGGGCCG GGGCTTGGAG GGGGGTCGGC TGCCACAGGC      60
TCACATCACG GCCTCCATAT GCAGGATCCT CAGGGCCTCG GAGATCTGCG CGCTGGGGTC      120
CATCTGGCCG TACATGCCCA CCAGGAAGGC CCGGTGGAGC AGCACAGCCG CGTGCTCTTG      180
GCACAGGAGA GCGTACTCAG GCAGGTTCCG GAGGGCCGTC TGCACACCT CAAAGTCTCTG      240
GCTGCCCAGG CAGTACATGA ACGTNGGGCA GGAAAGCGGC TGCAATGCNG GGGGCTGTCT      300
GCATGGAGCG CAGGGCCAGG CTGAAGGCGA GGTTGCGGCA ACACTCCTCG GCCGAGCTCA      360
TCAGCCGCTG CAGGTTGGTC GAGAAGAAGC TCAGGATCTC GGGTCTCCGC CGGGACATCT      420
CGTCTATGTC ACTCAGAACC TCCAGCAGAT CCTCCACCGT TTGGCCCCGG GAAAGCCGTT      480
TCATGTAGGG GGCCATCTCG GCCGCGGTCA GAGGGGTGAA CAGGGAGACG CTGACCAGGG      540
GCAAGGAGCC GGCTGAGCTC TCCTCCTCGC CCTCTTCGTC CAGGCCTCGG TCGGTCCTGT      600
CGTCCCTGCT GGGCAGGCTG AGCCCTGCAA GGAGGGATC      639
```

(2) INFORMATION FOR SEQ ID NO:1132:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 448 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1132:

```
GGTCTGTGGT CTTGGAGGCT TAAATTGTAA AATACATCCC TTATGGAATC CTAAATTCCT      60
CTAGGTGTTT TTGGAAGGCG CATTGAGCC TTGTGAGCTA AAATGGAATG GATTTAATAT      120
TTCTATCTG GCATTTCCAT CTGCCCCTG GTACACAAGT CACTGGCCTG GAACTCAGCC      180
TTGATTCAC TCCCGTCTTC ACGGATTAGC TGTGCTGTTA TGTTGTCTGT GCTGCAGATT      240
GGCCCATGTG GGAAGTCGGG GGGGACCTGA TTTCTGCTT GGAAGACTTG GGGGACTGCC      300
GAGCATATCA AAGTGTTTAT AGTCACCAAG TGAAGTGCAG CACAACCATC TCCTCTCCAG      360
CAAGCCCTGA AGTCAGTAGT GCCTGCAGGT GAAACCAACC AGCCCTGTGT TAGAGGAGGA      420
AAAGCGGAGA TGACGTGGAA GTCTCGAG      448
```

(2) INFORMATION FOR SEQ ID NO:1133:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 372 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1133:

```
GAATTCGGCC TTCATGGCCT AGGGCTATGG CCGGAGCTTG AGATACGCCG CTCTGAATCT      60
TGCCGCCCTG CACTGCCGCT TCGGTCACTA TCAACAGGCA GAGCTCGCCC TGCAGGAGGC      120
AATTAGGATT GCCCAGGAGT CCAACGATCA CGTGTGTCTC CAGCACTGTT TGAGCTGGCT      180
TTATGTGCTG GGGCAGAAGA GATCCGATAG CTATGTTCTG CTGGAGCATT CTGTGAAGAA      240
```

GGCAGTACAT TTTGGGTTAC CGAGAGCTTT TGCTGGGAAG ACGGCAAACA AGCTGATGGA	300
TGCCCTAAAG GACTCCGACC TCCTGCACTG GAAACACAGC CTGTCAGAGC TCATCGATAT	360
CAACATCTCG AG	372

(2) INFORMATION FOR SEQ ID NO:1134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1134:

GAATTCGGCC TTCATGGCCT AGCTGGTTCT TTTATTTTGG TGTCTCAGGG ATGTAAAAGA	60
TTTTTAGTGC ATAATATTAA ATGGCAAAT CAAATTTCCC AACAAATATAC AAAATAAAAT	120
CCCATTTACA AAGGGAAAAG GCTTTATCTA TTTGTATATC TTCTTATATG TATATAAATT	180
CATAGAAAAC TATCTGGAAG TGTATGTAGC AAAGCATTAA CAATGGTTAT CTCTGGGTAT	240
AAGAAGGAAC TAGAACTGAA GAAGATGGTG GTGATAAGGG AAGGTATACC TTTCTTTTTT	300
TTTTATTCTG CTGTGCTTGA GTTTTAAAGA ATGAGAATAT TCATGTATTC CTTGTATAAT	360
TATAACACAG AAAACCTCCT TATTAGGAAT AGGAGGCTGA TTTCTTTTTT AATGACTGAT	420
CTTAGGTCCT TTTGGGTAT TTCTCCTCG AG	452

(2) INFORMATION FOR SEQ ID NO:1135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1135:

GAATTCGGCC TTCATGGCCT AGGAGGAGGG AAGGATTGGG AGCAGTGGGG TGTGAGTGGG	60
AGAGGAGGTA GGAACCCAGA TGGGGAGAAT CGAGCCAAGT TCTGGGTTGG AGGAACTTT	120
CTTATTTAAC TGAGCTGGTG GGTTACATAT CTAATGTTGC AGGTGATGAA TACAGGCTGG	180
GGTAGCCGTC TAAATCCACC GAAAGAAGTA AATGAAAGTG GTTTCTTGTA GGTGAAAGG	240
TCAAGGTAAA TGGCTGGTTT TTAGGAAACA ACTGATCCTC GAG	283

(2) INFORMATION FOR SEQ ID NO:1136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1136:

GAATTCGGCC TTCATGGCCT ACTGGAGACT TGTAATTAGT CTAAGCATAA TATGATTAGG	60
TGGATGAAAT ATTTGGAGT TTGGTTTGT TTTAAATGTA AATACTCATG AAAAGTAAAA	120
CATACTGCAC TGTGTCCTG GGAATATTTT TGTTATCTTT AAAATACTCA GTATTATAGG	180
CATTATTTAA CACAGCCTTA CATTGCCCCG GTTTGACCTG GAGGCCGAAA TGAATTGTGA	240

CTTATGTCCC AGCTGGGTCT CGAG

264

(2) INFORMATION FOR SEQ ID NO:1137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 653 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1137:

```

GAATTCGGCC TTCATGGCCT ACCACGTTTC CTCACCTGTA AAATGGACAC TGCAGCTATG      60
TCTGCTGTTC CACATTGTTG ATAGAACTGG ATGCTGTGGT GACATTGGG ACACATATCAT      120
GGTGCTGGG GTGGGTGGGT GCCCAGGCCT GTGGGCTTCT GTCTTTCATC AAAGAACTTC      180
AGATCCCAGA AAATTAAGAT TCTCAAAACA TAACTGTCGG AAAGGGCTTT TGAATCCACC      240
TTGGTGGCCT CTTCTGCCT CCAGGGCTCA TGAGATAGGC TGACTTCATA TGAAAGTTTT      300
GAGGATGAGG AAGTCTCTCT CCTCTCAGA TACTGACCCT CTCTCTCCTT ATTTCTTGG      360
TGCCAGAAT AGGGCTTTGG TTATCTTGAA TGAATGAATA TAACTCACA GGTGTGATCT      420
GAGCCACCTA AAGCCCTCTT TGGGTCTGTC TCAGCTTGAG GGCATCACCT AAAGGCCACT      480
GGCTGCATTT TCCAGGAGGT GTTTTCTAAG CTGTATCTAT ATAGGAATGG GGAGGAAAGC      540
TAAGTCATTG TAGACTGAGA GAAAGGGAAT AAGAGTCTGT TCCAGACCAG CTAGGGCTGA      600
CAAGCTTAGG CAGCTGGGGG CAGAGGGCAC TGAGAATGAG GCCCTAGCTC GAG          653

```

(2) INFORMATION FOR SEQ ID NO:1138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1138:

```

GAATTCGGCC TTCATGGCCT ACAAAGGTT CTTGATGACC ACCACAATCC TCGCTTAATC      60
AAAGATCTTC TGCAAGACCT AAGCTCTACC CTCTGCATTC TTATTAGAGG AGTAGGGAAG      120
TCTGTATTAG TGGGAAACAT CAATATTGG ATTTGCCGAT TAGAACTAT TCTCGCCTGG      180
CAACAACAGC TACAGGATCT TCAGATGACT AAGCAAGTGA ACAATGGCCT CACCCTCAGT      240
GACCTTCCTC TGCACATGCT GAACAACATC CTATACCGGT TCTCAGACGG ATGGGACATC      300
ATCACCATTG TCGAG          315

```

(2) INFORMATION FOR SEQ ID NO:1139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1139:

```

GAATTCGGCC AAAGAGGCCT AGTTAATACT TATTTTATTT TCTGTTTTTA TCATCTAGTC      60
AACTCGCAA CTTCCAGCAT TTGTCTAAAT CTACTCAATA TATTCCAGTA CATCAGATAA      120

```

```

TATATCAGTT TCATCCTCCT GAAAACTCT TTTCCAGTGT ATCCTGACCT GCTCTAATTT      180
TGACTTGATG CTTTCTGTAT CTGGTGACA GCTGTTACCT TGGAACTTTC CCTTCATCAT      240
TATTCAGAGT GTTCTCTAG TTTTCTCTT GCATTGGATT TTGTGCTTCC TGAATCCTCT      300
CGAG                                                                    304

```

(2) INFORMATION FOR SEQ ID NO:1140:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 303 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1140:

```

GAATTCGGCC AAAGAGGCCT AGGGTTTGT TTGGTTTGGT TTTAGTTTT TGTGGGAGAA      60
TTAAGATTTT TTAAGAGATA TTTTCAGATT TTTCTGTTGT CAGTTTGGT AATTGTGTGTC      120
TTTTAGGAAA ATTTCATTTC ATCCAAGTTG TTGGATTAT TGGCATAAAA TTTTTCAGAA      180
TATTCCTTTA ATATCCTTCT AATGTCTGTA GAATCTAATC TGTATTGCAG TCTCTTCATA      240
TTGGTAATTT GTGTTTTTTC TATTTTTTCC TGGATCAGTC AGTCTAGCTG GGGAGAAGTC      300
GAG                                                                    303

```

(2) INFORMATION FOR SEQ ID NO:1141:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 330 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1141:

```

GAATTCGGCC AAAGAGGCCT AGTAGCTTAG TTATTGTTA CTTTGAAGCC CTTTGCCTC      60
TACTCTCTCC CATATATCTT CTCCTGACAG GGTGAAGTCA CCTATAGCAT TTCCTAGTGT      120
ATGGAAGTAT TAATTTCTT CTTACTGGA AGAGCTACTA GCTTTTCTTC ATACAGTTTC      180
CTCTGCTCCA GTTTCATAAG TTTCTTTTGT GCTTGATCT GTTTAGGATC AGGTGATATG      240
GCTTCATTTC TCATGACTGA AGCCCGGCAA CATAACTCTG AAATTCGAAT GGCAGTCAGC      300
AAAGTGGCTG ATAAAACGGA TCATCTCGAG                                    330

```

(2) INFORMATION FOR SEQ ID NO:1142:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 294 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1142:

```

GAATTCGGCC AAAGAGGCCT AGAGGGGAGC CTGGCCTCTG GCATATTCAT CAAGTATGAG      60
TTCTGGGGAT GAGTCACTGT AATGATGTGA GCAGGGAGCC TTCCTCCCTG GGCCACCTGC      120
AGAGAGCTTT CCCACCAACT TTGTACCTTG ATTGCCTTAC AAAGTTATTT GTTTACAAAC      180
AGCGACCATA TAAAAGCCTC CTGCCCAAAA GCTTGTGGGC ACATGGGCAC ATACAGACTC      240

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ACATACAGAC ACACACATAT ATGTACAGAC ATGTACTCTC ACACTCCAGT CGAG

294

(2) INFORMATION FOR SEQ ID NO:1143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1143:

GAATTCGGCC AAAGAGGCCT AGTTTGTAGT CAGAATAACA TTAATTTTGA GAGATTGAGG	60
TAAAGAACCT TAACTAATGC TAAGGAGTTT ATTTTGATTA ACATAGGTTA TTCTGACCAC	120
CACCTCTTCC TTCCTTAATC TCCTTAGAAT CTGACAGTCT CAAAGCTGTC ACACAAATTA	180
GACTAATTTT GACACTTTGA AATGAAACT TCAAGGAAGA AGTAGCCACG GACAGTTATG	240
TTTATAATCA GTAGGTGGCA CTCTTTCCTC AGGTAGCCCC CCATTTTCAC ATGATGTGTT	300
TGAAGGTAA ATGCCACCAA AAGTGCTCGA G	331

(2) INFORMATION FOR SEQ ID NO:1144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 508 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1144:

GAATTCGGCC AAAGAGGCCT ACTTCAGCAT GACTACTCAG TTGCCAGCTT ACGTGGCAAT	60
TTTGCTTTTC TATGTCTCAA GAGCCAGCTG CCAGGACACT TTCACTGCAG CTGTTTATGA	120
GCATGCAGCG ATATTGCCCA ATGCCACCCT AACACCAGTG TCTCGTGAGG AGGCTTTGGC	180
ATTAATGAAT CGGAATCTGG ACATTTTGGG AGGAGCGATC ACATCAGCAG CAGATCAGGG	240
TGCGCATATT ATTGTGACTC CAGAAGATGC TATTTATGGC TGGAACCTCA ACAGGGACTC	300
TCTTACCCA TATTTGGAGG ACATCCCAGA CCCTGAAGTA AACTGGATCC CCTGTAATAA	360
TCGTAACAGA TTTGGCCAGA CCCCAGTACA AGAAAGACTC AGCTGCCTGG CCAAGAACAA	420
CTCTATCTAT GTTGTGGCAA ATATTGGGGA CAAGAAGCCA TCGGATACCA GTGATCCTCA	480
GTGTCCCCCT GATGGCCGTT CGCTCGAG	508

(2) INFORMATION FOR SEQ ID NO:1145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1145:

GAATTCGGCC AAAGAGGCCT AAATTGCTGG CGGATTTAGA CCGGTAGAAA ACCCGGGATG	60
GTTTATTTTG ATTGAGCCCC CTCTGGGTGG CAGAGAGGAG GCTTGGGCTC TGGGCCCTTT	120
ACGTTTGGAG AAATGGCTTT ATCAGCTCAG TTGAAAGGTT TTTCCCTCTA GCTAGTGAAA	180
GATAAACTTG GAAATGCAGG TTTCTCCAGC GGTGTTGGT GGGGACAGGG GTCGCCTAGG	240

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GAACTTGACAG GGGCCGCGGC CTCTGTTGTG CTCTTCTGGA GAGTGCACTG TTTGTGGAAC      300
TTTTCTAGAG TGGCAAAAAC GATCTCCACT GTCGGTGAAA GGGCAGTTCC TGAAGTCAGC      360
TCATGGTCCT GGCTCCCCCT CTCCTCCAGCA GTGAACTGGG GGTGACTTCC TGATCTGCCC      420
AGCACAGGAG AGCCCCGCAA AGCGCCTGGG AGGCCCTCGA G                                461

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(2) INFORMATION FOR SEQ ID NO:1146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1146:

```

GAATTCGGCC TTCATGGCCT ACCATTTTGG ATTGATTTT GTGTATAGTG TAAGATGAAC      60
CCAATTTCTT TCTTTAGCAT GTGGGAATTC TGTTTTTCTG TCACCCTTTT TTTTGTAGAT      120
GGGGTCTCAC TATGTTGCCC AGGTTGGCCA TGAAGTCCTG AGGTCATGTG ATCCTCCTTC      180
CTCAGCCTCC TGAGTAGCTA GGACTACAGG CATGTGCCAC TGTGCCTGGC TCCAGCAACA      240
GTTGTTGAAG AGACTGTTCT TTATTACTT ATTGTATCCT CTGTGCTCGA G                    291

```

(2) INFORMATION FOR SEQ ID NO:1147:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1147:

```

GAATTCGGCC TTCATGGCCT ACCACCTGCG CCACGCCGAC TTGGGAGGAT GGTGGCCTGC      60
AGCGGCCAAG AAGCCAAAAA AAAAAATTT TTTTTTTTCA GATACTGTGC TTGATTTTTG      120
GAGAGGGGAG AGGTGGAAAT TCCTAAATGG CTAATGCACT GTTCCCTCCA GCCCGAATGC      180
CTCCTGCCAA ACCCCTTTTC CCGTCTGCCT CTGTCCCGC ATCCTTGTTT TCCCTGGGT      240
CCGAAACATT TTTCCGAGG ATGAACAGGG GACATCTTTA GGTCTTCTCA CTCTTGCTTT      300
GGTGTGTTGCC GCAGCATGGA AACAGGCAC CCCTCGAG                                338

```

(2) INFORMATION FOR SEQ ID NO:1148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1148:

```

GCAGGAATCA GATTCACCTA TTAGTAAGCC GCACTCGCTG AAGGGGAGAG CATGAGCAAG      60
GCAGACGTGA GCCACTGCGC CCGGCCTGAA GAGTTTTTGC TAATTGGATA TTAGGGAAAA      120
CCACAGGATG GATTAAGACA AGAGAGGGAA GGTAAGGTTT TAGACAGCAG GATTATGTCT      180
GTTAGTTGGT TTTATGTAC TTTTCTAGCC AAGCTGTACC ATCCTGTTTT TGTTGGTTGG      240
TGAATGCTTC CAGCTCTTTT CCTCCAGCCC TTGGAAGAGG TGGTCCTATA ATTGTTAAGC      300

```

ATCTAGCTAG GGTGATGAGT AGGAATAGCA ATAAGTGACA GGGAAATTGA AGGCTGCAGG 360
GCTCTTTGCA GCGGCTTAC TCGAG 385

(2) INFORMATION FOR SEQ ID NO:1149:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 303 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1149:

GAATTCGGCC TTCATGGCCT AGTCACATGA ATGAGAGAAT TCTAAATGCA AGAAATGTGC 60
AAAGGCACAG AAACACAGAA GAGCATGTTG TACAACCTGG CTATAGTTTA GATTTTGTGT 120
GTGTGCTATG AGAGTGTGCG TGTGCTGTGA GTGTGTGTGT GGGCGCACGC ACGCATTGTG 180
AGGAGGTAGG GAGAAGAGTG CCGGCATAAC ATGAAATGAT ATTGGACCTC AAATGGTATG 240
CTAAGATGTT TGACAATTTT ATTCTAAGCA GTGAGTTTTT AAATTTAGAC ATGCAATCTC 300
GAG 303

(2) INFORMATION FOR SEQ ID NO:1150:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 419 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1150:

GAATTCGGCC AAAGAGGCCT AATTGAATTG TATTGGTCTT TTTCTCTTTA ATATTTTAGG 60
TGCTTTTATA TATATTAGGA TTATTAGTCC TTAGTTTGTG AAATAAGCTG CAAATATTTT 120
TTCCCAATT TTTCTTTTGT CTCTTTGCTT TATTCTGGT GTTTATTTTT CCCCAGGTGT 180
ACTGTTTTCT ATAGCCAAAT TATTGATCTT TTCTTTAATT GCTTTTTTGT TCACTCAAAG 240
GAAGGTTTTT ACCACTGAGA GGTATATAAA TAATCACTC ATATTTTAC TCTTTTTTTT 300
TGCTTATGTT AATTTTTTGT TTGGAACAAT CTCAAATTCA CAGAAGTGTT GTGAGTACGT 360
TGCAAATAAC TTGTTTTTTC CTTATGCATT TCAGAGTAAG TTACCAGTCC GCGCTCGAG 419

(2) INFORMATION FOR SEQ ID NO:1151:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 394 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1151:

GAATTCGGCC AAAGAGGCCT AGCGGATGGA GTCTTTGACA GTGTTTTTGA TCTCCTGCAG 60
ACGGCTGCTC AGGAAGCTGT TGACCCGATC CAGTTCCCGG TCGGGCCACT CCAAGAGCCT 120
CTCCCTGGCA GGCCTTGGCT CCCGGCTTCC AGAAACACGA TTTGCCTGCT TTAGAGCTTC 180
TGCTGCCAAC TGGGCCTTCT CTTTTCCTT CTTTTTCAGC TTGTGCGGG CCCGCTTGGC 240
GGCCTTGGCG CTGTTGGGGA CTTTGGGCTC CGTGCTGTTG ATGAATTCCA GCAGCTCATC 300

CACATCTCGG TGGTCCACGG CGGGCTCCCC AGGGATCCCC CCCAGGGTGC CCCCTTCAT 360
GGGCAGCTCC TCTTTCGCC TGGTCAGCCT CGAG 394

(2) INFORMATION FOR SEQ ID NO:1152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1152:

GAATTCGGCC AAAGAGCCTA CTGTGAATCA CGAACTGGCT GAGGGCGGCT GACCGCTTGT 60
AGCTGTTCCG GCCATGCACC ATAAGAACCG GCCAAGATGC TTAAATTGAG TGATGGAGAA 120
GTCTGCAGCC AACGAAGCCT GTTTTCCTTC CTTTCCTTCC ACTCCCACGC CGCAGTCAGA 180
TTCCTGAATC ATGCTGACGT CATTGCCTCC GTCCCCTACT GCACAGGTGA GCTTGCCCGT 240
GCGCTCCTGA AGCAGGCGCA CGATCTGGGC CTTCTGGGTG GGGGCACATC NGCAGCAGAC 300
TACGGCCGGG CACTGGCAGG CCAGCTCCAT GAATCGTAC TCATAGTACT TGAGGCAAAC 360
CTCCAGGGAG TCTCCCGAGA TGACCAGGC ACAATCATGC TTCCTGCGGA AGGCGTTCAG 420
CTCGAG 426

(2) INFORMATION FOR SEQ ID NO:1153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1153:

GAATTCGGCC AAAGAGGCCT AAGCTGATAT TTATTGGACA TTTGCACCAT GCCAAGCATT 60
CGGCTTGGAT TATCCCATTT GTTCTCACA GCCGGTATTT ATTGTCTGCT CCTCTGTGCC 120
AGGTGCTGTG CTCTGGGCAG GGGCACTGCA TGGGCTGCCT GCCCTGGTGG AGCTTGTGGT 180
CTGATGGGTG AGGCTGACCC AAGCCCACCC CATTGCCAAC AGGGCCAGGG CAAGAGTACA 240
CACAGGGGCC TCATACCATA TGTCTCGAG 270

(2) INFORMATION FOR SEQ ID NO:1154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1154:

GAATTCGGCC AAAGAGGCCT AGCTGAAATC ATTCTGAAAA CTCAAACAGT AGACTTCAGC 60
ACACAAGGAA AGCCAAAGCC ATTTGAGGGG GAATAAAGCC AAAAGCCTTT CACCTTATTC 120
GTTCCAAGAA TCTCACC GCCCTCCTTAT CCCCCTCCAA AAATAAGCCA TTGCACACAG 180
ACAGGCAGCA TGGCTAGCAA ACGAAAATCT ACAACTCCAT GCATGGTTCT GACATCACAA 240
GTAGTAGAAC AAGATGTGCC CGAGGAAGTA GACAGGGCCA AAGAGAAAGG AATCGGCACA 300

```

CCACAGCCTG ACGTGGCCAA GGACAGTTGG GCAGCAGAAC TTGAAAACTC TTCCAAAGAA      360
AACGAAGTGA TAGAGGTGAA ATCTATGGGG GAAAGCCAGT CCAAAAAACT CCAAGGTGGT      420
TATGAGTGCA AATACTGCCC CTACTCCACG CAAAACCTGA ACGAGTTCAC GGAGCATGTC      480
GACATGCAGC ATCCCAACGT GATTCTCAAC CCCCTCTACG TGTGTGCAGA ATGTAAC TTC      540
ACAACCAAAA AGTACGACTC CCTATCCGAC CACAGACTCG AG                                582

```

(2) INFORMATION FOR SEQ ID NO:1155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1155:

```

GAATTCGGCC TTCATGGCCT AGGATCCGTG AGGGAGACCG CATCATCCAG ATTAACGGTG      60
TAGACGTCCA GAACCGGGAA GAGGCGGTGG CCATCCTGAG CCAGGAAGAG AACACCAACA      120
TCTCCCTGCT GGTGGCCCGA CCTGAGAGTC AGCTGGCGAA AAGGTGGAAG GACAGCGACC      180
GGGATGACTT CCTGGATGAC TTTGGCTCTG AGAATGAGGG GGAGCTGCGT GCTCGTAAAC      240
TGAAATCACC CCCTGCCCAG CAGCCCGGAA ACACTCGAG                                279

```

(2) INFORMATION FOR SEQ ID NO:1156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1156:

```

GAATTCGGCC AAAGAGGCCT ACATTGTAA TATAATTAA CAGAAGTTGT GAAACTAAAA      60
TTTTCTAAGA TTAAGTGGTA GTTCATTGTA AATGAACATA ATGAACAGAA TTTATGACTC      120
CACTGTGGAA AATGCTATCA AATAACTAAG GAATATATAT GGAATAAGTG TACATATGTA      180
AAATATTGTT ACTAGAGTTA GATATGTGCC AAAGTCCATT TATCCCAAAT CCTGTCTGAA      240
AAGGAGGGGT ACATTGTGTA ACATTTTGA GTGCTTAAAA ATGCCAAAAA CAAATGGTAA      300
ATTCTACTT TGATAAGTA AAAAAGTTAA ATGTGTGTAA AAAAGTGCTC GAG                                353

```

(2) INFORMATION FOR SEQ ID NO:1157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1157:

```

GAATTCGGCC TTCATGGCCT ACGGTGGCCT TTGGGGCCGA AGTGGGCGTG CGGCTCGCGC      60
TGTTGCGGCG CTTCTGGTG ACGGAGCTGC TCCCCCGTT CCAGAGACTC ATCCAGCCGG      120
AGGAGATGTG GCTCTACCGG AACCCCTACG TGGAGGCGGA GTATTTCCCC ACCAAGCCGA      180
TGTTTGTGCG TGGAGAAAGA TCGTCTTTCC TCCCTCCCA TGACCGGGCT TCCCGCGGGC      240

```

ACCTGTGCGT TTTCCACCCC GAGACGGCCT TTGTAGGGAC CCACTGCCCA CTCCGCTGCT 300
GTGCGCTGGG TTCCGCCTCC TAGGGCTCGA G 331

(2) INFORMATION FOR SEQ ID NO:1158:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 178 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1158:

GAATTCGGCC TTCATGGCCT AAAAAGTTAG ACTGACATCT AGCTTTGACA ATCATAGTAT 60
GTTTATTTT CCTGAGGGGG AATAACTTAT AATGCTGTTT AGTTTGTAC TATTGGTGTG 120
TTGGTGAATT TTAAACTGT GTGCTAACTG CACGATTGAA TTCTAGACCT GCCTCGAG 178

(2) INFORMATION FOR SEQ ID NO:1159:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 401 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1159:

GAATTCGGCC TTCATGGCCT AAGCACTTTG GGATGTTGAA GTGAGGGGAT TGCTTGAGCC 60
CTGGAGTTCA AGACCAGGCT GGGCAATATC GCCAGACCCC ATCTCTTAAA AAAAGTAGTT 120
CTTTACTGTT GCCTCTATTG ACTCTTGAAT GCAAGAAAGA ACATTTGCCC TTTGACTTCT 180
AATATTATCT TATATTCTCT CTCTTTCAA AGATCAGAAG CACATGCTGT AAACATCAAT 240
CATGATCATC TTTGTCTCCC TTATCAGATT GTCAAAATTA TATCTTTTCC TATTTTCCTG 300
CATACCTTAT CTTTTCCTA AATTCTCAGT TCTCCAAGTT CTCAGAAATC ATAACCTCAG 360
ACCTTGAAAT GATGACTCTG TTCCACCCCC ATCGTCTCGA G 401

(2) INFORMATION FOR SEQ ID NO:1160:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 350 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1160:

GGGGGGCCAG ACACGCNTGG GGTAAGAAGG GCCTGGTGGG AGGAGTTCAC AGAGCAGACG 60
GTGCACTGGG ACCAGGAGAG CAGAACACAG GCCATAACTA TAGGGCAGGT GGGGCAGGAA 120
CGGGTTAAAA ACGAGATCCA AGCCAGCCAG ATCGCAGGAG GTGCGGGGGG GTCGTCCCCC 180
TTCTGTTCTC CCCCAGGT CACAGTGCAT GCAATAAAAT ATATATACAG GAGCTAGATC 240
CGTCCTCTGC AGGGGCTCTG AGGGTCCAGA GTCCTCTCG GGTGGCGGGA AGCCAGTGGC 300
GCTCCCTGGC GGCCAGGCCG GGCTGGAGCC ACATGCGTCG GGTCTCTGAG 350

(2) INFORMATION FOR SEQ ID NO:1161:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 597 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1161:

```

GCCCCGGAGC ATCTTAAGAG CTGAGCGCAG CTGACAACTA GGGGCCGGAC CGTCGCAGGA      60
GGCGTCCGCT GGATACCTTC CCCCTTCCCT GACCTAGAGC TCTACAGCTG CTGCCTCGGT      120
ACTGACCGAG GGTTCACAGA GCTGTCTCAC CATTGCAAAA ACGTTATAGC AACAGCCTCT      180
GATTACGACA TGGCTGAGAT CACCAATATC CGACCTAGCT TTGATGTGTC ACCGGTGGTG      240
GCCGGCCTCA TCGGGGCCTC TGTGCTGGTG GTGTGTGTCT CGGTGACCGT CTTTGTCTGG      300
TCATGCTGCC ACCAGCAGGC AGAGAAGAAG CACAAGAACC CACCATACAA GTTTATTTCAC      360
ATGCTCAAAG GCATCAGCAT ATACCCAGAG ACCCTCAGCA ACAAGAAGAA AATCATCAAA      420
GTGCGGAGAG ACAAGATGG TCCTGGGAGG GAAGGTGGAC GTAGGAACCT GTTGGTGGAC      480
GCAGCAGAGG CTGGCCTGCT AAGCCGAGAC AAAGATCCCA GGGGGCCTAG CTCTGGATCT      540
TGTATAGACC AATTACCCAT CAAAATGGAC TATGGGAAG AACTAAGGAA CCTCGAG      597

```

(2) INFORMATION FOR SEQ ID NO:1162:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1162:

```

GAATTCGGCC TTCATGGCCT AGAAATAACT TAAATCCTG AATCAGATGT TTCTCCGTAC      60
ATGGCCTATC CAGATCACCG TAGGGTGAAG CTCAAAGTCA GCAAGCCTCA CCCACATACT      120
CAGAGCTTCC TTTCAGTGTT GAGACCTTCT TCCCTCTGAG CAGATGACAA AGGAGTTTGA      180
AACCAGCCTG GCCAACATGG TGAAGCCCCG TCTCTACTAA AAACACAAAA ATTAGTGAA      240
ATGGTGA CTG TAATCCAGC TACTCAGGAG GCTGAGGCAG GAGAATCGCT TGAATCCGGG      300
AGGCGGAGGT TGCACTGAGC TGAGATCGTG CCATTTCATT CCAGCCTGGG CAACAGAGCA      360
AGCCATCACA GATTTGGGAG CAACCAAGAA AGCCAGGGAC AGGGTATGCT TGGTAACCTG      420
GCAAGAGCTG ACAAAGGGGA AAAATAAAAC CCCACAGAAA GAGCAGGGAA CTCGAG      476

```

(2) INFORMATION FOR SEQ ID NO:1163:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1163:

```

GAATTCGGCC AAAGAGGCCT AGATGAACAT GAACCTGCGG GAGCTGTACC TGGCGGACAA      60
CAAGCTCAAC GGCTGCAGG ACTCGGCCCA GCTGGGTAAC CTGCTCAAGT TCAACTGCTC      120
CCTGCAGATC CTGGACCTCC GGAACAACCA CGTGCTAGAC TCGGGTCTGG CCTACATCTG      180
CGAGGGCCTC AAGGAGCAGA GGAAGGGGCT GGTGACCTG GTGCTGTGGA ACAACCAGCT      240
CACGCACACA GGCATGGCCT TCCTGGGCAT GACACTGCCG CACACTCAGA GCCTGGAGAC      300

```

```

GCTGAACCTG GGCCACAACC CCATCGGGAA CGAGGGTGTG CGGCACCTCA AGAACGGGCT      360
CATCAGCAAC CGCAGCGTGC TGGCCTCGG GCTGGCCTCC ACCAAGCTCA CGTGCGAGGG      420
CGCGGTGGCG GTGGCGGAGT TCATCGCTGA GAGCCCCGC CTCCTGAGAC TGAACCCCTCG      480
AG                                                                                   482

```

(2) INFORMATION FOR SEQ ID NO:1164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1164:

```

GAATTCNGCC AAAGAGGCCT AAGGAGCGCT GTTAAAGCTG ATACATTCCT GTGGGTCAAC      60
TATGCAACTA ACTCAGATTT TGAGCAAACA AAGCTCTCAA GTTGGTGATC CTCAGGAGTC      120
TCTGCATTAG TTGACAGCT CTTCTGGAAT TATCTTCTAA GTCAACTGTG GGTGGGTAG      180
GTGGCTCTGC TGATTTTTCG CTGGACTTCC ACATTGGGA CCAGTTGGCT GTNATCAGCT      240
CTAGAAAGGG TGTGGCTGTT TTACATTGGC TGTTCCTC ACATTCCTCA AGCAGGTACT      300
GTAATAAAGA ACTGGAGAAA TACAGTCAGA TGGGAAGTAG CCCCTGCTGT CAAGGAGCTT      360
GCCATCTAAT GGGGGAGACA GGCAAGTAAA CCAAAGACTA CACAGTCAG TATGGTAAGT      420
GCCATGATTT TGATGTGACA GGGCACAGTG GACGACCTTC CAAATCAAAG CAAGTAACTA      480
GGGCAGACT CGAG                                                                                   494

```

(2) INFORMATION FOR SEQ ID NO:1165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1165:

```

GAATTCGGCC TTCATGGCCT AACTCTATC TGTGAACACA ACTTTTCAGC ACTACAAATG      60
CAAGCAACTG CGCAGTCACA GTTGGGGCTG CTAATTGGA AATCCAGTTT AGGCTGATTT      120
GAAAAGACAA CAGCATTTT GCAATCACTG GTGTATCCTT TACGAGAGAG CTAGTCATGC      180
CATTTTTTGT TTTCTGAAGA CGGCCTTTT TTCTTTTTA TTATTATTAT TTTTTTAAAT      240
TTGGGATCTT GCCTAATTCT TTAGTACAAA GCCTGGCCCT AAAACCGTAG AGCTCGAG      298

```

(2) INFORMATION FOR SEQ ID NO:1166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1166:

```

GAATTCGGCC TTCATGGCCT AGATAGAAAA GAATATTCCA AGTGTATGAA GTATAGAGGT      60
GGGGAAGTTC AGGGTAGAGA AGTANTAGCA GGAATAGAAT ATAGGGGGAC AGAAAAATAG      120

```

AGTGGAGCCA GATTCAGAGA ACTTTNAGAA GCAGGTAAAG AAGTTTAGGA TTAATGGACA	180
AGTCATTGGG TCTCCAGGTT TCTTTGAGGG AGAGTGATAT CTGAGCTCTG TTTTAGAAAG	240
ATTAATCTGA AAGGAGGTAA CTCGAG	266

(2) INFORMATION FOR SEQ ID NO:1167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1167:

GAATTCGGCC TTCATGGCCT AGGTAAATAA TGCCAAGTTA CTGGGGTCTA GAAAGAAAGT	60
TTTCTCTTGG ATCAAGAGAG TGTGAGTTTC CTAAGTTTCT TCAGCAGGGA TGTTGGTCCT	120
TTAGTTAGGA GGTTTAAAT CACCAGGAAG TAAGGGTGAG GAAGAAAGTC TGGGTCCATG	180
TTTGAGAAGG TGA CTGATGG TGGTGGAAGT CCTTCCTGTG ATGAGTTAAT GATGCGTATT	240
TCTGATAAAG ATGGGAAGTT ATTTACATCG ACATTAACCA AATCTACCCT TCATGCAGAA	300
AGAAAGAGCT CTTGGGCCAT TCTCTATTAA TGAAACCATA CCAGGGTCAA TATTACAGTG	360
TCTCTGAAAT AACTGAAAA TACTTCCCTG GCTCAGGTGG TGGCCCATGC TACCTCCAGG	420
CAGTTCTACT TGATTAATGA TGCAATGGAG ATAATCCTAT TGCATCCACC ATCAAGGAGA	480
GTTGGGCAGT CAACTCGAG	499

(2) INFORMATION FOR SEQ ID NO:1168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1168:

GAATTCGGCC TTCATGGCCT ACACAAACAA ACCCAGAATA CTCTATTACT GTATTTGTGG	60
GGTACAATCC ACTCAACTCT ATTATGAAGC CCAAAAAATA AATCTGTTAA AAACAATAAT	120
AGCTACACCA ACCTGTTAAG AGATAGGTAA TATAAAAATA TATAGTTTGA GACAACTAAA	180
TCAAATGGA GGAGGGGATA GAGTTCAAGA AGTAGAATTT TTTTGCCTGT GCTTTTCTTG	240
GCCTTTGTTT GCTTCTATTCT TTTTATTTGG AATCAAAGAT AAGTTATCAA CTCTTTAAAA	300
TAAGTTGTTA TATGTATAAG ATGTTTCTG TAAGCCTCAT GGTAACCACA GTACAAAAAC	360
CTATAGTACA ATTCTAAAA ATAAATACA AAAAAATTAA AATATACTAC CAGAGAGCTC	420
TCGAG	425

(2) INFORMATION FOR SEQ ID NO:1169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1169:

```

GAATTCGGCC TTCATGGCCT AAAAGGTTTG ATCTTGTAAT GTGTCACTGT GTTTCCTTAG      60
TGGCCAGCCA GCCTTCAGAA TAGCTAAAGG CCTTCCTTCC TTCCAGTCAG CCTGAGAGAG      120
AACACCTGTC CCCTAAGCAC CTGGTGTCTC CATTGGAGGC AGACTGCTCT CAGGAGACTA      180
CTAGAAGCTT CAGCCCCGAA GACAGGCTGC TCTCTCATGC TGGTGGCCCA AATTGAGAAA      240
GTGGTGTCCC TTCCTGATTT TGCCACCAGC CCTACCGAAT AGTTGTAAAC CAGTATCAGG      300
AATTGGGATC CTCTCGAG                                     318

```

(2) INFORMATION FOR SEQ ID NO:1170:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1170:

```

GAATTCGGCC TTCATGGCCT ACATTGGTCG TTTTATTGCC ATGGCACTAT TTCATGAAA      60
GTTTATCGAT ACTGGTTTCT CTTTACCATT CTACAAGCGT ATGTTAAGTA AAAAACTTAC      120
TATTAAGGAT TTGAATCTA TTGATACTGA ATTTTATAAC TCCCTTATCT GGATAAGAGA      180
TAACAACATT GAAGAATGTG GCTTAGAAAT GTACTTTTCT GTTGACATGG AGATTTTGGG      240
AAAAGTTACT TCACATGACC TGAAGTTGGG AGGTTCCAAT ATTCTGGTGA CTGAGGAGAA      300
CAAAGATGAA TATATTGGTT TAATGACAGA ACGGCGTTTC CTCTCGAG                                     346

```

(2) INFORMATION FOR SEQ ID NO:1171:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1171:

```

GAATTCGGCC TTCATGGCCT AACTTTTATT CCCTTTTAAG TCTGGTAAAG AATGAATACT      60
TGGACGTTTT GTTTCATGCA GATTAGTTA GCAACTCGAT TATCAAATGG TAGAATATCT      120
GTATGCACTG AAGCCAAATT CTCAGTAACT CAGCTTTTGN TAGTCATATG AGGATGATGA      180
ATAATAGGAN TCCAGAGCAG TTAACAAATT GATACAAGTG GTAGGAAAAT TTGATATGAA      240

```

(2) INFORMATION FOR SEQ ID NO:1172:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1172:

```

GAATTCGGCC TTCATGGCCT AGTTTCNTTT TTGTATCTCT ACTGATATCA CCAGGATAGT      60
NTACTCTCCT TCTAGCTTTC TGCTTACCGC AACTTGGATA ACACACACAT ACACACCCAC      120
AAAAATGCTC ATGAACCCAA TCCGGAGAAG GTTCCAGCAG GTCCCCCACC CTCCCCCTCT      180
CCTCCTACTT CTCCTCTTGA CAGCGAGGAC AGGAGGGGGA CAAGGGGACA CCTGGGCAGA      240

```

CCCGCCGGCT CTCCCCCACC CCCACCCCA TCTCGAG

277

(2) INFORMATION FOR SEQ ID NO:1173:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 258 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1173:

GAATTCGGCC TTCATGGCCT AGAAAAGTCT AGAAAATAGC TTAAATAACA AACACGTGTG	60
GATTTGTTAG ACCAAGAGCA AGGGAGACCA TTTAATGCAG TTATTTAACA ATATTTAGTA	120
CTTTCCTTTA CCTTGTCTGC TGTGCCATCA TTCATGCCTG TCAGTGTAA AAATCCCAA	180
ATTTCCCAA CAGATTTTCA TTTCACTTCC GTCAACTTTT AAATTAAAGT TTTTAAATTC	240
CTGTCCCCAC TCCTCGAG	258

(2) INFORMATION FOR SEQ ID NO:1174:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 334 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1174:

GAAAGTTGCT TTTGATGTCA AAATGGAAAA TGAAAAGTTA GTTTTAGCAT GTGAAGATGT	60
GAGGCATCAG TTAGAAGAAT GTCTTGCTGG TAACAATCAG CTTTCTCTGG AAAAAACAC	120
TATTGTGGAG ACTCTAAAAA TGGAAAAAGG AGAGATAGAG GCAGAATTGT GTTGGGCTAA	180
AAAGAGGCTG TTGGAAGAAG CAAACAAGTA TGAGAAAACC ATTGAAGAAT GTCTTGCTGG	240
TAACAATCAG CTTTCTCTGG AAAAAACAC TATTGTGGAG ACTCTAAAAA TGGAAAAAGG	300
AGAGATAGAG GCAGAATTGT GTCGGCCACT CGAG	334

(2) INFORMATION FOR SEQ ID NO:1175:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 403 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1175:

GAATTCGGCC TTCATGGCCT AGTGCTTGAA CTCACGCATC TGTTTTACCT GCATCTGCAG	60
GCGATGGGGC AGGGGCCACG GAAAGAGTCT GAGGGCTGCT TGGTGTAGTC AGGTGTGTCT	120
CAGGCATGCG GAGCTGTGAG TGCCTGCAGG AGAGACACCC AGGAGGAGTT TTTACATTTT	180
GGTCTAAAAA GCTCTTGGAT TCATCTCATC TCATGGAATG ATCCTGTCGG ATGACGCTGA	240
CGTGATTGCT TCAGACTTAG AGGTGAATAA ATTGAGGTCC AGAGAGGTCA CAGTCACGAA	300
GCTCATGGTA GACTGAGGCC ACTAAACACC CGTCTCCTGA TTTTCAGTGG CGTCCTCATT	360
TGCATACACC TGGGCCATCT TGGTTTTCG AAGAAAAC TC GAG	403

(2) INFORMATION FOR SEQ ID NO:1176:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 590 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1176:

```

GAATTCGGCC TTCATGGCCT AGGTACCTTG AACATGGCTG TAAATTAATC TTAACTGCC      60
TTGGTGGAGT CTTCTTGATT TATTGAAGAG AATAATCACG AAAATAATTT TTGTTTGTTC      120
TTTGAGACGG AGTCTCGCTC TGTCAACCAG GCTGGAGTGC AGTGCCACGA TCTCGGCTCA      180
CTGCAGCCTC TGCCTCCAG GTTCAAGTGA TTCTCTGAT TGAGCCTCCT GAATAGCTGG      240
GATTATAGGT GTGCACTACC ATGACCAGCT AATTTTGTG TTTTAGTAG AGATGGTGTT      300
TCACCATGTT GGACCGGGCT GGTCTCGAAC TCCTGACCTC AGGTGATCTG CCCTCCTCAG      360
CTTCCCAAAG TGTTGGGATT ACAGGCATGA GCCACCGCAC CTGACATAAA TATTTAATGT      420
AATACCGTGT AAGACTTTTC CATTGGGTTT TGAGAAACAC GTTAATGAGA GAAATTGCTT      480
AACATTGGAG AGGATTGCAG AGAATATTGA CTAATATGGT GGGGTGAGGA GGAACAACAT      540
CAATTAAGAT TCAGATTAT TATTAAAAA AACTAAAAGG CGGCCTCGAG      590

```

(2) INFORMATION FOR SEQ ID NO:1177:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1177:

```

CTCGAGGTAG CCACAGTCCT GATCCTAGTG ACAAATGGGG GCATGTGTCT ACATCCGGGT      60
CGGCGGAGGG CTCATTTCAT CTGGCCTGGG GGGAAATGAG TATTAATTG TTTACACAGA      120
CGTAAACACA GCCCAAAACG CATCAGCACG TTGACTCAA CGCCCGCAAC GCCAGGGCAA      180
AGGCAATTG GTTAACAGGG GGAAGCGAAC AGACGAGAC GCCTGGAGAC CCAGGTGCCA      240
CAACCCGGTT AATCGCGGTG CAAATAAGGG CAAGTCCCCT CCCCTGTGCC GTGTGGTCTT      300
GACAACGACA CTAGTTTATT CTACTAACAA GGCGGGCGGG GGGTCAGATG GGCCACACAC      360
ACCCATTTTC CTCAACGGGA CCCCAACGCG ATCTCAGCCT TGCTGTGCTA CTTAGGGGCA      420
AGACGCGTTC CCCATTTCGA AGCCGAGGA AAGCGCGGCG AGAGCGGGT AGCCCTCGGA      480
GCGGCTAAGA GCCTCGGAAT AGCGCAGAGG AAGTCCCAC CCCTCTCGGG GCTGGGAGCC      540
CTAGGCCATG AAGGCCGAAT TC                                     562

```

(2) INFORMATION FOR SEQ ID NO:1178:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1178:

```

GAATTCGGCC TTCATGGCCT AGAAGCACAG GTAAACAAG CTGGGGCTTA TGGTCAGCAT      60

```

```

TGGAAGCAGG GAGCAGAGTG GGGAAAACAG CAGTCTTATG GGAAGTGAAC AGGGTTGGAG AATGCCACAGC 120
GTGATCTGAC TCTATCTGCA AGGTAGTGTT GGAAGTGAAC AGGGTTGGAG AATGCCACAGC 180
TGGTGTCCAC CGCAGAATTG ATTTTCATGTT TGGTATGCAG GGACCCCCCA CTCCACACTT 240
AGTCACAGAA ATCTGTGTTG ATTGTTGTGG CATGAAAGCA GGGAAAAATA GTTTGTTTTT 300
TTCTCCACAC TTCCTTCCCA AGATCCCGGC TAACTCGAG 339

```

(2) INFORMATION FOR SEQ ID NO:1179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1179:

```

GAATTCGGCC TTCATGGCCT ACTCACCGGA GAAAAGAAGT TTCNGAAGAA AACCACAACC 60
ATGCCAATGA ACGAATGCTA TTTTCATGGGT CTCCTTTTGT GAATGCAATT ATCCACAAAG 120
GCTTTGATGA AAGGCATGCG TACATAGGTG GTATGTTTGG AGCTGGCATT TATTTGCTG 180
AAAACCTCTC CAAAAGCAAT CAATATGTAT ATGGAATTGG AGGAGGTACT GGGGTGCCAG 240
TTCACAAAGA CAGATCTTGT TACATTTGCC ACAGGCAGCT GCTCTTTTGC CGGGTAACCT 300
TGGGAAAGTC TTTCTGCAG TTCAGTGCAA TGAAAATGGC ACATCTCCTC GAG 353

```

(2) INFORMATION FOR SEQ ID NO:1180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1180:

```

GAATTCGGCC AAAGAGGCCT ACAGAGTGCT GTGCTTAAGT TTTACTTCTT TCCACCTTTA 60
AATCTCTGAT AAGTTTCTTT TTATCTAAAG GTTCCACTTT GTTCATTACT TTTTGTTC 120
TTATTATTGA TTTGTTTCGAG AACCTGAGTT TCTTGACCTG TGTGATTTTG TACCACCTGG 180
ACTTTCTGAC TGTGTTTGCC CAGGCTGGAG AGCAGTGGTG GGATCATAGC TTAAGTGGACT 240
CAAGCCATCC TCCCGCCTCA GCCTCCCAAG TAACTGGGAC TATGGGCACA CTCGAG 296

```

(2) INFORMATION FOR SEQ ID NO:1181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1181:

```

GAATTCGGCC TTCATGGCCT ACTTGAGTTG TACATTAGAT CTTTAAACTT GTTAGTCCTA 60
CATATCTGCT ATTTTATATC CTTTGACCTA CATTTTCCCA TTTCTCTCCA GTGTTCTCTC 120
CCCAGGTAAT CATGTTTTTA TTCCCTTTCT CTGTAAATTT GACTTTTTTT TTTGGATTCC 180
ACATATAAGT GAGATCATGA TCATGCGGTA TTTTCTTTC TGTGCTGGC TTATTTTACA 240

```

TAGTATTATG TCCTCCAAGT CTACCCACGA ACTCGAG

277

(2) INFORMATION FOR SEQ ID NO:1182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 192 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1182:

GAATTCGGCC TTCATGGCCT AGAGATACTG GCTGGCAATT CTTGGCGTTC CTTGGCTTGT	60
AGCTGTAAGA TCGCTCTAA TATCAGTCTC TGTGTTCATT TGCCTTTTCT CTGTGTCTGT	120
GTTCAAATGT CCTTTTTTTT TTTTTTTTTA GGGAGTCTTG CTCTGTGTCC CACTCAAAC	180
GCTGGGCTCG AG	192

(2) INFORMATION FOR SEQ ID NO:1183:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1183:

GAATTCNGCC AAAGAGGCCT AGTAAATAGT TGTCTGTGA CATTGTTTAG AGAATAATGA	60
CAAGAACAAA AATCTGTGTG TTCAGTATAG ACACAACCAT CCTTTTCTTT TTTTTTTTTT	120
TGAGACAGAG TCTCGCTCTT GTTGCCCAGG CTGGAGTGCA AGGGTGCGAT CTCAGCTCAC	180
CGCAACCTCC GCCTCCCGGG TTCAAGCAAT TCTCTGCCT CAGCCCCCG AGTAGCTGGG	240
ATCACAGGCA TGTGCCACCA CGCCGGGCTC TTTTGTATT TTAGTAGAA CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:1184:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1184:

GAATTCGGAC TACTACAGGT GATACTACAG TGACTACTAC AGTAATTCGG ACTACTACAG	60
GTGGCTAATT CGGATTACTA CAGGTGGACA TAATTCGGAC TACTACAGGT AATTCGGACT	120
ACTACAGGTG AGCTAATTCG GACTACTACA GGTGGACATA ATTTCGGACTA CTACAGGTGC	180
ACCTGTAGTG GAGAACATTT AGCAATGATA AAGCCGCTGC TGATCCTTCT CGAG	234

(2) INFORMATION FOR SEQ ID NO:1185:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1185:

```
GAATTCGGCC AAAGAGGCCT AGAACAGTTT AGAAACAATT TCCCTGCCTT TGCTTTGGGT    60
TCCCTGTGAT TGTCTCCAC ACTGTTTTC TGGCTCTATC TGTCTCCCTT GCCACGGCCA    120
CTCAAGCCTA GCTGCCCAAC AGCTCCTTCC CTGAAGAACC CCGGCCTTCA GGCTTGACAG    180
GTGATCTCAT CCTCTTCTT TTCTCCAGG TTGTTGTAGA CTTCCACCTT CCCTTCTTCT    240
CCTGGTCCTT TCCCCTTCT AGTGCCAATG TGGGCCACGC TTTTCATCCA CCTACTCGAG    300
```

(2) INFORMATION FOR SEQ ID NO:1186:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 324 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1186:

```
GAATTCGGCC TTCATGGCCT AGTGATGAGC CCTCCTCTTC AGCTAGGAAA ATGACGGTGT    60
TCAGAAAGTT AAAACTTCTT CGCTGGAAGG ATTTTCATCTT AAAGTTGGGA GACTGGAAGA    120
AATTAAAGTG TTCTAAATGG AAGAGCATTC ACCACATGTG TTCTGTTTGG GGTGACATT    180
TAGCTTTTGT TTTTATTTTA GAAACGGAAG ACTCTGGTAG CAGTCCTTGA AATCTTGATG    240
CCATTGCTAT TTTCTGCATT GTATTGTATC TTCGTTTTAG TAGTGCTCCA ATAAAAAGAC    300
CTGCTACTAG CTGCAAACT CGAG                                     324
```

(2) INFORMATION FOR SEQ ID NO:1187:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 308 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1187:

```
GAATTCGGCC TTCATGGCCT AGTACGTTGC TGAAAAGAAG TTTATTGCTA TTTTCTTATT    60
TTATTATACA AAAC TAGATT TGCTTAAAAC ATTTCCAGT CTCTTTAAAG GAATGCTAGT    120
TAGTGGGAGG CCACAGCTAG TAAATTACCC TCAGTAGTGG TTTCAAGTAG TCCATAACTA    180
TAAAAATCGT TACGGCCAGG ATATGCCGGA ACAGAACACT CCCCCTGGG GTCCTCAGCC    240
TTGGATGTCA GCTCGGCCCC TCAAGGGGTC CCTACACCTG GAAGCTGATT CCACTCATCA    300
GTCTCGAG                                     308
```

(2) INFORMATION FOR SEQ ID NO:1188:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 251 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1188:

GAATTCGGCC	TTCATGGCCT	AGAATGAAGA	AGGTTCCCAA	GAAGTTAGAG	GAGATTCCCC	60
CAGCCTCTCC	GGAGATGGCA	CAGATGAGGA	AGCAGTGCCT	GGACTATCAT	TACCAGGAGA	120
TGCAGGCTCT	GAAGGAGGTC	TTCAAGGAGT	ATTTGATTGA	ACTGTTTTTC	TTGCAACACT	180
TTCAAGGGAA	CATGATGGAT	TTCTTAGCTT	TCAAGAAGAA	ACATTATGCC	CCATTACAAG	240
CACCACTCGA	G					251

(2) INFORMATION FOR SEQ ID NO:1189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1189:

GAATTCGGCC	TTCATGGCCT	AAGGAGTTGG	AAATTGTGCA	CAAAGAAAGG	TGGTGAATAA	60
GTAAAGTCGT	AAATTCAAGA	CCACAACAGA	AAGCTTCACT	GCAGACACTG	GACTTGAACC	120
ACCATTGAAA	ACAGTCAGGA	TTTGGAGATG	ATAATTAGGA	GGATGTGTAT	TCTAGCTGTG	180
GAATTTATTG	TGGGCAAGCA	TAGGAATGAG	AAAGTACAAT	GAAAAAATGT	AAGTAGACCC	240
ACCAAGTTAG	AGAAGAAGGT	CCTGGTTAAG	AAAAATGAAA	GATTTTTTTG	AACAACAGAT	300
TAATGTGATG	AAATAGATGT	TCAAGAGTGA	AGATAAGTTG	AAGATAGGGA	CCCCTCGAG	359

(2) INFORMATION FOR SEQ ID NO:1190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1190:

GTTGTTAGGC	TGGTGTGTT	ATGTTGCTGT	TGTTATGCTG	GTCGTGCTGC	TCCATGTTCT	60
CCAGGTGTTC	TTCCCTTTTA	TCGTCACAGT	TACCCCGTAC	ACCTGACAAC	TGGACATCTG	120
CGCCTGGGGT	CTTCAGCCTA	AACACACCTA	AACCCCTCCAC	CAAACCCCTC	TGCTTCGGCC	180
TCCCGGTGTC	TGTGAGCGCC	TCCACTGCCC	ATCCCTCTGC	TCAGGCCCCA	TTTCAGGGC	240
TCGAG						245

(2) INFORMATION FOR SEQ ID NO:1191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1191:

GAATTCGGCC	TTCATGGCCT	AGTCTCAAAA	AAAAAAAAAA	AAAATAGTGT	TCAGCAAGGT	60
TGAAGCATAA	AAGGTTAATA	GCCAGAATCA	TTTATCAATT	GTATTCTAT	ACATCTACAA	120
GACACAATCT	GAAAATGAAA	TTAGAGAAAC	AATTTCACTG	GGCAACAAGA	GCAAAACTTC	180
ATCTCAAAAT	AATCATCATC	ATCATCATCA	TCATCATCAT	CATCATCTAC	AATGTCATTT	240
CCCATCCAAC	GCTCGAG					257

(2) INFORMATION FOR SEQ ID NO:1192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 748 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1192:

GAATTCGGCC	TTCATGGCCT	AAGGACATGG	CAGAGTTCCT	GCTAAAAGAG	AAGACAGTTA	60
TTTAAGGAGG	TTTGAGATTC	AAGGGCTTTT	TTAATTTTAA	AATTAACCAT	GGTAGAAACC	120
TGTGTGTTAA	TATGCTGAGG	GAAGTTGCCA	ATAGTGAGAT	GAAAGATCTA	GGCAAGGGGA	180
TAGCAAGGTG	ACTGCACCAG	ATACCTGGAT	CTGGGCAGGA	ATAAACCTCA	ACAGTGATCA	240
TGTTGACCTT	GAGTGACAGG	GTATAATGTT	TGGGAAGGTG	CTTTGTAAAC	TATAAGGGGC	300
AATACAAACA	TGTAGTACAC	CTTCTCTGAG	ATCCGGGAAA	GGACAACCTG	AGCATAGGTT	360
GGGGCTGGTC	ATAGGCCACT	CTCCCCTACT	GTTTCTCTAG	AGTGTGTGTA	GTCCCTAGCA	420
AGTCTCAGAT	GCCTCGACCT	TCATGGCCTA	GAGAGTTCTC	ATCAGAACAG	GAAGGCAGTG	480
ATGATCCATT	GCATGGGCAG	GATTGTTCTA	CGAAGACGAA	GATCTCCGGA	AAGTGAAGAA	540
GACCCGGAGG	AACTAACCT	CAACCTCTGC	CATCACAAGG	CAACCTAACA	TCAAACAGAA	600
GTTTGTGGCC	CTCCTGAAGC	GGTTTAAAGT	TTCAGATGAG	GTGGGCTTTG	GGCTGGAGCA	660
TGTTGCCCGC	GAGCAGATCC	GGGAAGTGGG	AGAGGACTTG	GATGAATTGT	ATGACAGTCT	720
GGAGATGTAC	AACCCAGTC	GACTCGAG				748

(2) INFORMATION FOR SEQ ID NO:1193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1193:

GAATTGCGAA	CATGGCAGCG	CGTTGGCGGT	TTTGGTGTGT	CTCTGTGACC	ATGGTGGTGG	60
CGCTGCTCAT	CGTTTGCGAC	GTTCCCTCAG	CCTCTGCCCA	AAGAAAGAAG	GAGATGGTGT	120
TATCTGAAAA	GGTTAGTCAG	CTGATGGAAT	GGACTAACAA	AAGACCTGTA	ATAAGAATGA	180
ATGGAGACAA	GTTCCGTCGC	CTTGTGAAAG	CCCCACCTAA	TCTCGAG		227

(2) INFORMATION FOR SEQ ID NO:1194:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1194:

```

GAATTCGGCC TTCATGGCCT AGTATATATA TAAATACTG AGGATTAGG GCTGATGTAT      60
ATAAATAAAA TACTGATAAC TTTTTCCTT TCTTTTCTT TTTTGTGA GATAGTGTC      120
TGCTCTGTTG CCCAGGCTGG AGTACAGTGG CACCAAACCG CTAAGTCAG CTTGCCCTC      180
CCAGGCTCAA GCAATCCTCC TGCCTCAGCA CCCTCAATAA CTGGGACCAC AATTGCATGC      240
CACCAAACGC ACCTCGAG                                         258

```

(2) INFORMATION FOR SEQ ID NO:1195:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 314 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1195:

```

GAATTCGGCC TTCATGGCCT AATGAATTCT CATTTCTGG AGGCTGAAGA TCTGTGCAGG      60
TGTCTGTGGC CAATGTTAAG CCTACGACTT TAGATGAGCT GGCATAAATC TTGGGAGAGT      120
TTTCTTGCT GTGTTCCCTC TGAATTTCTC TGTGCTGTTA GAGGCAGGGA CAGAAGAGAA      180
CCAGCATGGC AGTGCTGGGC TCAGGGTGAT GCCTGCCTGC CAGCACAGCG GTTCTTGTC      240
CTGTCCACA TTGCTTCTTG GAAGCCTTTT TACAGCCTCA ATCATCTTGC TTTTCTACC      300
GCAGCTATCT CGAG                                         314

```

(2) INFORMATION FOR SEQ ID NO:1196:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 385 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1196:

```

GAATTCGGCC TTCATGCGGG GACTTCCACT CTTTCTCGTT TTCTCGGAGC TCCGCCTCCA      60
GTCCTCTAT CTTCTCTTC AGCTGCGTGT TCTTCTCCTC TCTGTGGATC TCACGGCCTC      120
TTCTCTGCT CCACGCTGGC CACCGACTCC TGCAGCGCCG TGGGCAGCCG GCGCTCGCTC      180
TCCCGCCGGG TCTGCAGCTC CATCTCCAC CTCTCCCGT GGGCAGCTCT CTGCGTCGAG      240
GCCGCCTTCA GCTTGTGGTT CCCAGACTGC AGGTGCGTGT CAGCTGCAGC GGCTGAGAG      300
GCCTTTCATC GTCCGTCCCG TTGACACTGG ATGCCGGAGT AGAAGATGGG GCTCCATGCC      360
CGGATTCTCG GGATTATTAC TCGAG                                         385

```

(2) INFORMATION FOR SEQ ID NO:1197:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1197:

```

GAATTTGCAG TGAACCGAGA TTGTGCCATT GCACTCCAGC CTGGGCAAAA GAGCAAGACT      60

```

```

CCATTTCAAA AAAAAATCTT AAAAATACGA AGTTTTTCAT TTTTCTTAAA TTTTCATTGT      120
GACTACTTTA GTAGACTTGC CAGTAATAAG CCAGTTACCG CTTGAATCTC AGTTTCTTTA      180
TCTGGAAAGT GGTCAATATT TATCTGCTGT CCCCTTACCT AGAGGGAATC AAATGCGTTT      240
GATACAGGTT CTCGAG                                                         256

```

(2) INFORMATION FOR SEQ ID NO:1198:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 446 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1198:

```

GAATTCGGCC TTCATGGCCT AGAGAGCCCA TCTCCATCTG CCAGCCTGGA AGCAGCCATG      60
GCAAATGGGA TGTGTCCAC TGCCCCCGTT TGGTGCCACA GTTGGGTTTA TTCTCACAGC      120
TGCAAACCCA CGTGTGGGC TGCACAGCTG CCTGAACGAA GCTGGAGCGT GCAGAACAAA      180
CTGCATGGAA TGTCACGTGG GGTTTTCCAC TCTCGCCAC AGTGAGTTGG CAATGCCTGG      240
CCACGTGTGC TCTGTGGTCT TTGAAGTGA TCTGGGAGGA CAGAANTTCA AAAGGAAGAT      300
GAAGGCCCCA GCAAGGAGG TATTCCTGTC TTGAGCAGAA GGTAAAGTA GAAGGTGCAG      360
ATTAGGTACT GGAATAGTC ATGGTTTGGT TTGAATGGAG TAGAAGATTC CAGAGGAAGA      420
GCAGTGGGCG ACAGTGCTC CTCGAG                                                         446

```

(2) INFORMATION FOR SEQ ID NO:1199:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 369 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1199:

```

GAATTCGCCT TCATGGCCTA AATTGTAGCT AGGAAAATAA TATATGTCTT AGTTAAGAA      60
CTCATACTCT GGAATCAACT CATTGCACTT TCCTATATGT TTGGCCATGG GCAAAGCACA      120
TAACCTCTTA ATCAATTGGC TCGTCTCCAA GGTGAGGATA GTTATACTTA ATCCTCTTTA      180
GGAGTGAGAA TAAAAATTAA ATATGTGTGT AGCATAGTGT CTACAATGTT AGAGGTATTT      240
GAAAAGTGAT AGTTTATTTT TTGGAATTAT TTAGCATTAT TAAAAACAAG GGGGAGCACA      300
CGGTGGCAGC TTTCTGTCC CAGCTACTTG GGAAGCTGAG GTAGTAGGAT CGCTTGAGAT      360
CCGCTCGAG                                                         369

```

(2) INFORMATION FOR SEQ ID NO:1200:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 483 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1200:

```

GAATTCGGCC TTCATGGCCT AGACAGGTTG CTAGCTACAT GGGTCTCTGA AGAAGAGTTT      60

```



```

TCCAGCAGAA GGAGCAACTA GTGCAAAGCC CCTGAGACAC AACTGCACCT ATCCAGATTA      120
AGGACCACGG AGGAAGCCAC TGTAGGAGCA CAAAAAAGT AGGAGATGAA CAGAGAGGTG      180
AGGGAGGCTC CGTAGGTCCT AGTATGCACT TTGGCATTIA TTTACTGATT GAGATGCGAG      240
GTCATTGGAG GATTTCGGAGC AGAGGAAGGA TATAATCTGA CATTTTtagCA GGATCCCTTT      300
GAGTAAGTTA GCTGCGTAGA CCTAAGATGA ACAAGGACAG CCACAGCAAG ACCTGTAAGG      360
AGACTATCCT TGTAATCCAG GCAAGAGATG ATGGCAGCTT GGACCAGGGT AGTAGCAGTG      420
GAATTGATGA GAAGTGGTTG AAATCTGGAT ATATTTTGAA GATGGAGCCC ATGGGGTCTC      480
GAG                                                                    483

```

(2) INFORMATION FOR SEQ ID NO:1201:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 192 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1201:

```

ACCATATAAT TTGCCACTTG AAGGTACAA ATTCAGTGAC TTTTAGTAAA TTCACAGTTA      60
TATATTCATT AGGATATTCA GAGTTATATA TTCAACACCA CAGTCACTCT TAGAACATTT      120
TAATAACCTC AAAAAGAAAC CATGCACTCC TTAGCCATCA CTCCTAACCC AACTCTCCCT      180
CTACCGCTCG AG                                                                    192

```

(2) INFORMATION FOR SEQ ID NO:1202:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 281 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1202:

```

GAATTCGGCC TTCATGGCCT ACTTTAAACA TGTGGTCTTA CTGCCTGCAA ACACATACAG      60
ACTCTTAATT TTTATTTACA TAGATGTAAA TATACACATA TATTACTCTA AAGATAAACC      120
TTAAGGGTAA GAAAATTATA AAGTATGTGT GTTTNTGTGA ATATGAATTT GTACCTATAT      180
TCAGAAGAAA AGAGCAATAT TGGCACAATA CAAATCATCT TAATAAGGTA ACTAATTGGN      240
TGNGTGCACT GGCTCAGGCC TGTAATCGCA TCACACTCGA G                                                                    281

```

(2) INFORMATION FOR SEQ ID NO:1203:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 328 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1203:

```

GAATTCGGCC TTCATGGCCT AGTGATCTAC TTAGGTAGCT CCTGGAAAGC AAAGGAGAGA      60
GAGCAAGACC TGTACAGACT TTGTTTATGA GGAAAGCTAT ATAAGGATTA TAAGAACTGA      120
TAAATATTTC TTGTTTCCT TTTTGACAAA ATGGATTTTC TTCAGTTTCT TAAGCAGATG      180

```

TATTATTTCT GGGACGTTTT AGCCATGTAG TTTCTTTTTA TTCCTCTTTG ATACCCTGAA 240
 TAACTAGCCT TAGAAACACA AGTAAAGCTC CAAAATTTC ATTTTCTACA TAGTTTATTA 300
 CCAGATTGAA TTCTAGACCT GCCTCGAG 328

(2) INFORMATION FOR SEQ ID NO:1204:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 307 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1204:

GAATTCGGCC TTCATGGCCT AGGTCCTAAA AAGAGTAAAA GGTGAAAACA CTAAGTGATA 60
 TTCNAAACAA AAGAAAAAGA TGAAAAATAA GAACCTTGGT TAAAGAGCAG TCGAAATAAG 120
 TAATGATTAT AGCTATGATT TATATAGCAC TTNTTACAAG AAGCCAGGCG CTGTTTTAAA 180
 CACTTGACAT ACTTATTGTC TCATTTCATA ATTGTAACAA CCCTATCAGA TAGGTACTAT 240
 TTTTATCCCA CTTTACAGAG GAGAACTGA GGCACAGAAT TTTAAGTGAT TTGGCCGGGT 300
 GCTCGAG 307

(2) INFORMATION FOR SEQ ID NO:1205:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 425 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1205:

GAATTCGGCC TTCATGGCCT AAAAAAAAAAT GTAGTCTAGA AAGAGACTAG GAATAGAACA 60
 CTGCTGACTT GTTCTTATAC CAAGAGCTGG AGGCATAAAC AGTTTAAATA AAAAAGAATA 120
 CTTTGATCTT TTTGATGTAA CTTCCCTTTA GAGATTCTGT TTCCCTGTGC TTAAATTGTC 180
 AGGCTATTTC TGATTGCTGT TTAAATAATT GGTAGTACT ATTTGAGTCA NGCTTCTTAA 240
 AAAAAAAAAA ATATAAAAT TCGCCAGCTC AGCTTTCATT TAATTAGTAT CAAAGAAATG 300
 ATATCTGTGG CAGTGAACAT TAGTAGCTTG TTCCAGGGTT TATTGTAGGT TTGTTCAAGT 360
 CAGTACTGCC CATCTTGGCA CTTAGGTTCT TGGAAATACAG AGGTGGATAA GGTTTGCCCC 420
 TCGAG 425

(2) INFORMATION FOR SEQ ID NO:1206:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 504 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1206:

GAATTCGGCC TTCATGGCCT AAGACCAGCA CCATCGTGAG CAAGATTCCT GCTGCGCTGC 60
 TTCCAAAATG GAAAAGCATC ACAACTAAAT ACCTAATATC CTACCAAACA AACCACAGTC 120
 CCTACGTAGC CCTACTTCAG TCCCAGGAGA AGGAATCCAT GAATGGGCTG AGGTTCGAG 180

```

GGTAGGTTGT GGATGTCTTT CTCTAGAGGG GTCCACACACC TGGAAAAGAG GACACCCAGC      240
CCGNGGGATG AGGGAAGCTG GGCAAGGGAG AAAGTTGTTG AGTCACACTG GGGACCCAG      300
ATGTAGTGAG CTCAGCAAGA AAAGCCAGGT CCAGAGAGAG TCGCACAGAA TTCCTGACTC      360
ACAGCGCCCC TCGGTCCACA GTGGAGAGGA GGAGGAGGAG GAGCAGAAGG AGGGGGAGGA      420
GCTGCAGGAG GAGGAGGATT TGAAAGCGCT TTGGCCTTGT GTTATGTTTT GCTTCTTTTC      480
TGTGCCCCCC TCTAGGCCAT GAAG                                         504

```

(2) INFORMATION FOR SEQ ID NO:1207:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 242 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1207:

```

GAAATTTTTC AGTAACTCAG TGTCTTTAAC TAATAATTTA ATCATTCTAG TAAGAAAACA      60
TGCTTTGTAT GATTTTAGTC TTTACATTTA TTAATTTATG TAAATTAATA TGTGGGTTTT      120
ATGATCACCC ACGACATTGT CCTAATTGT CGACTGTTCT GTGTGCTCTT TTAAGAAGG      180
TAGTCTGTTG GCCGGGTGCG GTGGCTTACG CCTATAATCC CAGCACTTCG GACAGGCTCG      240
AG                                         242

```

(2) INFORMATION FOR SEQ ID NO:1208:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 152 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1208:

```

GTAGAATTGT ACAGTGCTTA TGAGTTATGC ATGTGTTTCT GGTCTTTGTT CTAGGATTTT      60
TTTTTTTTTT TGATTGCTGC TCCAGTTGCC TTACTTACTT TGACATTGGA GTTGACCACA      120
TGATGGTGTT CCACACTTCC CTAGGCTCG AG                                         152

```

(2) INFORMATION FOR SEQ ID NO:1209:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1209:

```

GAATTCGGCC TTCATGGCCT ACTACCCCTT TATCATTCAC TAACGTGAAT GTGGTGCTAA      60
TTTTTCCAGT CCATATCTTT GAACTTTTGT TAATATATGC ACATCAATAA GCAATCGAGT      120
TTTATCTATT CTAATTGTTT TAATGTACAA CTTTATGGGT ACATGTGCAA TTTGTTTCT      180
TGCATGGTGG CCAAATCAGG GCTTTTAGAA CATCCAACAT GCGAATAATG TACATTGTAC      240
CCATTAACTA ATTTCTCAAT ACTTCTGAGT CTTCTTGTC TATGATTCCA CTCTCTACAT      300
CACATGTACA CCTCGAG                                         317

```

(2) INFORMATION FOR SEQ ID NO:1210:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 282 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1210:

```
GACAGATTTC ATTACCTTGA AGTTCACCTGC ACTGAACAAT TCTCACTCTG GATGTATTCC      60
TGCTCTAGGA TGTGAATTTA GACTTTTGTG ATAGAGTGGG CTTTGAGAAA TAGCTTTTCT      120
GCTCATTTTA GTTTCATGAT GACTGCATGG AATGTTTTGC TTCACGCTTA TGCATTGAGT      180
TTTATCAAGC ATTAAGCAGT TGGCCGAAAC AGGTAATACT TGAACATTCA GTCCAAGAAA      240
AACAAAATGG ATTTGAACAT ACGTAGAATC AGTAAACTCG AG                          282
```

(2) INFORMATION FOR SEQ ID NO:1211:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 482 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1211:

```
GAATTCGGCC TTCATGGCCT AGTCAAACCC TAGAGCAATG CAGGCCTTGT TACAGATTCA      60
GCAGGGTTTA CAGACATTAG CAACGGAAGC CCCGGGCCTC ATCCCAGGGT TTACTCCTGG      120
CTTGGGGGCA TTAGGAAGCA CTGGAGGCTC TTCGGGAACT AATGGATCTA ACGCCACACC      180
TAGTGAAAAC ACAAGTCCCA CAGCAGGAAC CACTGAACCT GGACATCAGC AGTTTATTCA      240
GCAGATGCTT CAGGCTCTTG CTGGAGTAA TCCTCAGCTA CAGAAATCCAG AAGTCAGATT      300
TCAGCAACAA CTGGAACAAC TCAGTGCAAT GGGATTTTGG AACCGTGAAG CAAACTTGCA      360
AGCTCTAATA GCAACAGGAG GTGATATCAA TGCAGCTATT GAAAGGTTAC TGGGCTCCCA      420
GCCATCATAG CAGCATTTCT GTATCTTGAA AAAATGTAAT TTATTTTGA TAACGGCTCG      480
AG                          482
```

(2) INFORMATION FOR SEQ ID NO:1212:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 343 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1212:

```
GAATTCGGCC TTCATGGCCT AGGGTGATAT TTAACCTCGT GCCAATGGCT AAGCTCCAGA      60
CTTTGCCTCT CACACTTGGA GGGATTCCCT GCCACCATAA ATCTCGAACT TTTCTAGAGC      120
ACCACATTGT TTCCAGTTA GGTAAGATCT CATTATTCCA GGTGAGCACA GCGTTTCCAA      180
TGCTTTCCTC GACTCTGCAT CTTTCTTCCA GCTGCTTCTT CCTTCGCTGG GCTTCTTTCA      240
GCTCTCGCTT TTTGGCCTGA ACCACCATT CTTCATACTG CTGTCTGTGC TTCTGAGCTT      300
CTTCAGCTGG TTTTGCTGGG AGATTGCTG GTCTGCTCCT GAG                          343
```

(2) INFORMATION FOR SEQ ID NO:1213:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1213:

```

GAATTCGGCC TTCATGGCCT AGAGAACTA AAACCTCAGAG AAGTTAATTA CTGAACTCAA      60
GATCCCAAAG TGCTGGGATT GCAGGCGTGA GCCACCGCGC CTGGCTGAAA GAGCTTTTTT      120
AATGTATTAT TTATTTGTGT CAGGATAGAC TCATTGATGC GTGTTTTATT CAGTGGGTTA      180
TAATCTTTTA TTATGTATTC TGATGTTGGT GTTTTCCCAG TTTTAGCCAA TGGCATCCCC      240
TTCCATCTGG ATCCTGTGTT CTTTGGACAT GGCTCCAATC TCGAG                      285

```

(2) INFORMATION FOR SEQ ID NO:1214:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1214:

```

GAATTCGGCC TTCATGGCCT AGAACCAGGC CTTCCAGTAC GAGTTTGGAG CCATGTATGC      60
ATGGATGCTG TGTGTCTTCA CTGTCATCGT GGCCTACAGC ATCACTTGTC CCATCATCGC      120
GCCATTGGC CTCATCTACA TCCTGCTCAA GCACATGGTG GACCGGCACA ACCTCTACTT      180
CGTCTACCTC CCAGCCAAGC TGGAGAAGGG GATCCACTTT GCCGCTGTGA ACCAGGCCTT      240
GGCAGCCCCC ATCCTGTGCC TCTTCTGGCT CTACTTCTTT TCCTTCTGTC GCCTGGGTAT      300
GAAGGCCCCC GTCACCTGAG                      320

```

(2) INFORMATION FOR SEQ ID NO:1215:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1215:

```

GAATTCGGCC TTCATTTTGA AAGATATTTT TGTA AAAATC TGT TTGTTT CTTTAAATAC      60
TTTCCAGTGT TATCTGGGTT TCTTAATTTT TGACTTAAGG TCTGTAATAA TTTCTGCTTT      120
CATTCCTCTT AATATATTGT GTCTTCTTTT GTCTACATTT AAGATTTTAT CTTTATCAGC      180
TGTTTTGAAA AGTTTATTTT TGATGTGCTC TTTATGTTTT TCCTTATTTG TAGTGCTTGG      240
ACCTTGTTGGT GCTTTTCTTA TTTATAATTT TCATCAAATT TGGGGGGTTT GACCATTATT      300
GCTTCAAAAA TAATCTCTGT TCTCTTCTT CACTTCTCC AGTTACATAC TGTAAGAGTAA      360
ATGATAGCTA CCGAAGACAG AGTGATCCGT GATAAATATC ATTAATGCCT CTGAAGAGGA      420
GAATGACTCC AGTGAACCA CTCGAG                      446

```

(2) INFORMATION FOR SEQ ID NO:1216:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 263 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1216:

```

GGACTTTTTG GAGAAGCAGT ACTATTCATT AATTAAGTAT AGAGTGTCTT GTTAATCCTA      60
AAAGAAAGAG AGCCTTAATG AGGATCATGA ATTTTTTTTT TTTTGGGATG      120
GAGTTTCGCT CTTGTCGCCT AGGCTGGAGT GGGGTGCTAT CTCTGCTCAC CACAACCTCA      180
GCTTCCTGGG TTCAAGCGAT TCTCCTGCCT CTGTCTCCCG AGTAGCTGGG ATTACAGACA      240
TACGCCGCCA TGCCCAACTC GAG                                         263
  
```

(2) INFORMATION FOR SEQ ID NO:1217:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 325 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1217:

```

GAATTCGGCC TTCATGGCCT AAACAACAAC AATAACAACA ACAAAAACAT GTATAACTGG      60
GAAAAAACTG AAAGAGAATG CAGGATCATA AAAATATAGC AAACAAAGTG AGTGGGATTT      120
AAAATTAGTG GAATAAGAAA TAATGGGTAA CAATGAAGAA CATAATTTAG GTAATAGTAT      180
AGTATCTTGG GAGCCCTCCT GGAAGTATCT AGTTATGGAC AGTGAGCAGC AGAAACAGGA      240
TGTAACCTAA TTCAGCATA TCGATGGTTG TGGTAACCT AGAAAATGAC TCCAGGAAAT      300
AGGTGAGAAT CCAATCTATC TCGAG                                         325
  
```

(2) INFORMATION FOR SEQ ID NO:1218:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 293 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1218:

```

GAATTCGGCC TTCATGGCCT ACAGAGATAG GGTCCCATCC AGGTTCTTAA CTGGGTGGCA      60
CATGCATGGG CTAGATCCAA ATAGCATTGC AAAGCCTGG AAAACAGAAC TAGAATTGAA      120
ACCACCGCGG AAGACTCATT CGAACTCGTG GGCTGAACTC AACCAGGTCA ATGCTTCAGA      180
AAAATACCAG CATTCTCCAC AGGACATAAA CAAGATTGTC TCATAACATA CCATTCAAAA      240
TATTAGGATA CAATCCAAAA TTGCTCATCA TAAGAAGACA GGAAAACTC GAG                                         293
  
```

(2) INFORMATION FOR SEQ ID NO:1219:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 265 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1219:

```
GAATTCGGCC TTCATGGCCT ACGAGGATTG GGGTAGGTAT GNGCTTTNGG CTCATGTTTG      60
TGATGATAAC TGAAGTCTNT TGTGGGTCCG ACCTGTTGTA GGGTGTGGGG GAAAGTGAAG      120
GAAGAGAATG AAGGTGAGTC CCCGCCGTTG CAAACCTTCA CCAAACCACG CGGCCAGTT      180
TTCGTGAGTA CCCCTGTGTC CCAGAGAGGA GGACCCAGCG TCCTCGGCTC TGCCGCAGGC      240
CTTCTTGGTC TGGTGGGTAC TCGAG                                         265
```

(2) INFORMATION FOR SEQ ID NO:1220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1220:

```
GAATTCGGCC TTCATGGCCT AAGGAATTGA AACCCAGTAC TTTGCAGAAC TTCTTATGAC      60
TTCTGGAGTG GTCCTCTGTG AAGGGGTCAA ATGGTTGTCA TTTCATAGCG GTTACGACTT      120
TGGCTACTTA ATCAAAATCC TAACCAACTC TAACCTGCCT GAAGAAGAAC TTGACTTCTT      180
TGAGATCCTT CGATTGTTTT TTCCTGTCAT TTATGATGTG AAGTACCTCA TGAAGAGCTG      240
CAAAAATCTC AAAGGGGGAT CTCGAG                                         266
```

(2) INFORMATION FOR SEQ ID NO:1221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1221:

```
GAATTCGGCC TTCATGGCCT AGCTCATTCT GCTGGGGGTA GAGATGAGGG GAGGGAGTAA      60
GTAAACCTT GGAAGTAGCA GTAGAAGCCT GGGGGGATGC GTGTGCCTCA GTTTCCTCCT      120
CCACAACCTG ATATAGTGGC TGAAGAACTGG GGAGATACTT GATGGCGCGA ATGTCCGTTT      180
TCTCTCCCTT CCCACCTCCT GCAGGAAGCA GGACGGGGCA GGCAGCACCT GGTAGGCACA      240
GTGCTTTGCC CCTCCTCCCC TTCCCTTCTG GAAGTCTTGG GGCCTCAGTG CTTGCAACAG      300
CCTCCTCTCG AG                                                         312
```

(2) INFORMATION FOR SEQ ID NO:1222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1222:

```

GCGATTGAAT TCTAGACCTG CTGGCCTCAA GTGAACCTCC CGCCTCGGCC TCCCAACGTG      60
CTGGTATTAC GGGCATGAGT CATTGTGCCC AGTCACAGAA TTCATTTTAT TTGTGAAAAAT    120
ACAGTGGTAC AAGTAGGCCT TTGTTAAATG ACTAACCTGA AACCTCTTGT GAATGACAAA      180
CTCCTCTCTA CTCCAATAC TGGCCCATCC CTGCTTAAAT ACTGCTCAAT GAAGTTACTC      240
ATGCTAGTTC TTGAGGGAGT AACTCTAGAA TGATTCCATC TAGGAAGACA TAAGATAAAA      300
TGGTAAGTAT TCTAAGTTCT ATAGGTAGTT TAGTCATGCC ATATTATAAA CCTCCACTCC      360
AAAAATAGTG TGAGGTCATT TCTGGCCAGA GTGAAATAAA AAATGTATAA TGCCTGAACA      420
GTCTATTATT CTGACAATGA AAAAGATTAA TGCAGTTCCT TTTATCACTT GCATGAGTAA      480
AAAAATATAT ATATATATTG GCTGGGCTCG AG                                     512

```

(2) INFORMATION FOR SEQ ID NO:1223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1223:

```

GGGTGTTTCA TACAAAGAAT ACAAGTAACT GATGAATGAA GGGGGCATCT TGTGTCCCA      60
CAATCCTGCT GTGCGCACAC CACAGGTGAG CCGTTCTGCC TAAGGGAACA GCGCCGGCCC      120
CTCCCTCCGG CTCCTCCCA GCACCGTCTC CTCCACCCAG TGGCCTGGCC GTGGATGCTG      180
CCTGTGGCCC AGCTTTGAGA CACCGCCCTG ACACGTGTCC AGCCTTACGT GGAAGGATTT      240
GTCTGTTTGT TGGCATCTTA GTAGATGCCA CGTTAGTAGA TGCCATGTTA GTAGAAGGGA      300
TGTGGGCATT TCTTTGTAAG TTCCCAAAAG CCTATGAGGG TTTTTCAC GATTCCGTTT      360
CCAGTTTGGC TTTTGTGTT GTTGTGGCTG TTCTTGGCCC CCCTGGGCCC TGCAGTGGAG      420
TGGGGGGCTG CACCTGGGAG CCTCGAG                                     447

```

(2) INFORMATION FOR SEQ ID NO:1224:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1224:

```

GAATTCGGCC TTCATGGCCT ACTTTGTTTT ATATAATAAA GTATGCCTGT TATATTAAAT      60
AATAAGAATA TGGCAATTAG CGATATAGCA TACCCAAACA AAGATGTTCT CGATACAGTC      120
TGGCAAAGAC TATCCCAAGG TTATTTTAAT GAATTCAGAC ATTTTTCCT GTGGATATTT      180
CTCCATCTTA AAAAAAGTGG CAACCAAGGA AAATATTTAG ATGCAAATAC TCGAG          235

```

(2) INFORMATION FOR SEQ ID NO:1225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 134 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1225:

```
GCGATTGAAT TCTAGACCTG CCTCGAGACT GACGCCGCAC CATGACCCTC CTGCTGCTGC      60
CCCTTCTGCT GGCCTCTCTG CTCGCGTCCT GCTCCTGTAA CAAAGCCAAC AAGCACAAGC      120
CACCGCATCT CGAG                                     134
```

(2) INFORMATION FOR SEQ ID NO:1226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1226:

```
GAATTCGGCC TTCATGGCCT ACACACATCT GGTAAGCAGA AGCACGGAAG GCCTTTGTTT      60
CAGACAATCT TTAAATGAT GTTTGTATAG GGAACAGCTT TGGAAAGATAA AGAATGTCTC      120
TCTCTCTTAT GGTTTGAATG TGTCTCCAAC ACTTTATGTG TTGAGACTTC ATCCCCAGTG      180
TAACAGTATT GGGAAGTGGA GCCTTTAAGA GCTAATTAGG TCATGAGGAC AGCTCGCTCA      240
TGAGTTGACT AAAGCTGATA ATGTGGGAAC GTGTTGGTTA TCACAGGAGT GAGTTCCTGA      300
TAAAAAGAAT GAGTTTGGCC AGATTGTCTC TGTCTGTCTC ATCTGCCTGC TTCCACCTTC      360
TGTACTTCCA CCTGGAATGA CCCTCACCGG ATGCTGGTGC CATGCTCTTG GACTTCCCAG      420
CATCCAGAAC TTCTGTTTTT ATAAATTACC CAGTCTATGG CATTCTGTTA TAGCAGCAGA      480
AAATGGACAG AGACACCCTC AAATTAAAGG ACAGTCTTGC TGA CTATGAA TTAGAAAATA      540
TCTGGGTTAG CTCGAG                                     556
```

(2) INFORMATION FOR SEQ ID NO:1227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1227:

```
GAATTCGGCC TTCATGGCCT ACCTGCCTCG AAATACTACC GTATGGCCCA CCATAATTAC      60
CCCCATACTC CTTACACTAT TCCTCATCAC CCAACTAAAA ATATTAAACA CAACTACCA      120
CCTACTTCCC TCACCAAAGC CCATAAAAT AAAAAATTAT AACAAACCAC TCGAG          175
```

(2) INFORMATION FOR SEQ ID NO:1228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1228:

```
GAATTCGGCC TTCATGGCCT ACTGTTTCCT TGCCCTTTTC ACCGTCTGGT GGTTCCTGTC      60
```

AGCCCTTGGC TTGTGGCCCT CTCATCCATC TTCCGAGCCT AGCACTCCAG TCTCTGCTTC	120
TGTCATCACA TCGCCTTCTC TTGAGAAAGA TCCCAGGCTG GTATTTAAAT TGCCTGTTGG	180
CAGGAACCTT GCCTGTCTTC CCCTACCCCC ACAGCTCGAG	220

(2) INFORMATION FOR SEQ ID NO:1229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 526 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1229:

GAATTCGGCC TTCATGGCCT AAGTCTCTTG ACATCTCAAT TTACCCAGAC ACATCTCTAT	60
TTAATTATTC CCTGAGGAGG GGAAGTTGGG TATGGCGGTT GGAGGTGGAC AGGCTCCTAA	120
CAAGCACTTG CCAGCAGGGG GCACTCCCAG TTTTCGCTCC GCTGAGTCAC CCAACCCCTG	180
AGGCTTCGCC ACTTTCTAAT GTTTGCTGTG GCTACAATGG TCAGACCCAC AGGCAAAAAA	240
GTCGAAGTCC CTGGAGTCCC TGACCCCTCT TCCTCTCTAT AACGATTGGA AACTGTCCAA	300
ACCAACTCCA GTAGTTCTGG GCTGATGAAT CATCCTCTTG TGGGGCGGAG ACTGGGGGTA	360
GGGTGGAGCA ATGTGGGCTA GGACCCAGGG CAGGATCAAA ATCTCTGAAG ATGCAGAGCT	420
CCCTCTGCCC TGGGAAGAAG GAAGCAGGAT TTATTATAAC ATTTAGCTCA CTGTCCAATC	480
GACTAAACA AGCTCTCCA GGGCTCGGGC CAACTGTCTGA CTCGAG	526

(2) INFORMATION FOR SEQ ID NO:1230:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1230:

GAATTCGGCC TTCATGGCCT ACCATTGGGC TATGACCTGA GGAGAATCAA GGTAGCTTTC	60
TCAGGCCTCG TGGACATCGT GGATATAAGG AATGCTCTCG TAGGAGGGTA CAAGAACCCC	120
AGCATGATTC CAATAGAGAA GGCCAGGGG CCCATCCTGC TCATNGTTGG TCAGGATGAC	180
CATAACTGGA GAAGTGAGTT GTATGCCCAA ACAGTCTCTG AACGGTTACA GGCCCATGGA	240
AAGGAAAAAC CCCAGATCAT CTGTACCCT GGGACTGGGC ATTACATCGA GCCTCCTTAC	300
TTCCCCCTCG AG	312

(2) INFORMATION FOR SEQ ID NO:1231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1231:

GAATTCGGCC TTCATGGCCT AGCTTTATCC ACTCTGGAAT CCTGGAGGAG CCGCTACAAC	60
CAAGTTGTAA AAGAAAAGGG AGACCTTGAG NTGGAAATTA TTGTCCTGAA TGACCGGGTA	120

```

ACAGATCTTG TAAACCAACA ACAAACCCTG GAGGAGAAGA TGCGGGAAGA CCGGGATAGC      180
CTGGTGGAGA GACTACACCG TCAGACTGCT GAGTATTCCG CATTCAGCT GGAGAATGAG      240
AGGCTGAAGG CCAGCTTTCG TCCAATGGAG GACAAACTCA ACCAGGCACA CCTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:1232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1232:

```

GAATTCGGCC TTCATGGCCT ACGCAGCTCT ACCTGCTCCA GGGGCACCTG GACCTGTGTG      60
AGCAGCACTG TGCCATCCTC CTGCAGACTG AGCAGAACCA TGAGACCGCT TCTGTGAAGT      120
GGAAAACTTG AAGACATTCC TGCCTTCTTT GAATTGGCCA AGAAGGTGTC TAGCCGGGTG      180
CCTTTGGAAC CAGGGTTCAA TTAGTGCAGA GGTATCTACT GCTGGCACAT AGGGCAGCCC      240
AACGAAGCCT TAAAGTTCCT GAACAAGGCA CGCAAGGACA GCACTTGGGG CCAGAGCGCC      300
ATCTACCACA TGGTGCAGAT CTGTCTGAAT CCAGACAACG AGGTATGGT GCGGCTCGAG      360

```

(2) INFORMATION FOR SEQ ID NO:1233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1233:

```

GAATTCGGCC TTCATGGCCT AGAAGGACTG AAATGATGTT ATACTAAGGG CTACTGAACT      60
TTTTGCCTGT TCTTCCAGG TGTGACAGCC TTTTCTTTTC TTTCAGGTG GTTCGCTTTG      120
AGGTGGTCTG AAGCCAAGGC CTCGCGGAGC TTCTTGTGTG GTCACCTTGC TTCCACGTTT      180
CAGTTCCTGT TTTGTTTCTA CTGCTTTAGT TTTTTTTAAA GTTCTCCAGT GTCCCAAGA      240
GGTATTAGAA TCTTGCTGTA CCCAAGCAAG ACGTTAATTT TTCTTTTAAC TGTTTTGGGG      300
AGGGAGGGAG TGATAGCTTA ACTGCTGAAG CCAGGCGGGG GTCTGCTGGA GGATTCCAAC      360
AGAGAGTATT TCCTCCACTG TACAATGTCA CAGACTATCT CTATCATCAT TGCTTTGTGG      420
CAT

```

(2) INFORMATION FOR SEQ ID NO:1234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1234:

```

GAATTCGGCC TTCATGGCCT AGCATGTAAA ACTTCAGTCC TGAACATTTA TAGGGTTTTA      60
TAGAAGGGCA TCCTCCAGGG CTGGTCCATT CAGAGAAATG CTGCATGCTG CCGTCATGGA      120
ATGTGGCCCA CAGGACACCA GAGCCGTGAG AACCGGAGAG CAGACTTCCC TCACGGCTGG      180

```

```

GCTGAGCAAA CCCTCCAAAG CCCTCCTCAC GCAGTTACTA ACAATAGCAT GGGCTTACAG      240
CACAAGCACG TGTTCTCACC TTTTTCCTAT GCCCTGGACT AAGGTTTGGC CAGTGTAATC      300
ATATAAGGCC ATCCTGACAT TGTTTCTGTG TTTCAAAATT TGGATTTTTA TTTACATTAG      360
AACTACATTG CTCCTAGTAG AACATTACCT TTAGGGGACT AATTTTCCAT GGAGAACTAT      420
TTCAGCATAT TGCATGCTGC TCAGACCCCA AGTCAGATAT GCCCACAAGC TCGAG          475

```

(2) INFORMATION FOR SEQ ID NO:1235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1235:

```

GTTTTGAGCC TAGTAGCACT ACCTTCCAAG TGAGTCACAA CAAATTTGAT CCTATTTGGT      60
ATGTTTTTGT CCACTGTTAT GATTNATCAT GTATCTTACA AGAGCCACTC AAGCAAGACT      120
CTGCTTCTAT GTATGGTGAG GCCTNGTTGT TCTAGGCTAG AATAAACTCT TTGTATGCCT      180
CATTGAATAT GCCAGGTAAA ATTTATGCAG TCAAGAATGA ATTATTTTTC TGAATAAAGT      240
GTGTAGCAGT AGTTCAAAAT TGTGCCCTTG TTTAACAGT TTCTGTCNAC ACCTTCTCGA      300
G                                          301

```

(2) INFORMATION FOR SEQ ID NO:1236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1236:

```

GAATTCGGCC TTCATGGCCT AAGAGAAGAT AACATTTACA AGTAAACAGT AAGTGCAATT      60
GTATTTTAAT TTCTTGGTCT CCGAAAACCTC AGCTGTGACT GCTTTCCATT AACAGTTCCA      120
GCTCTATGTG TTTCTCTAA CGCTAAAGGC ACAGCCCCCG GGAATCTACT GCTTCCTAAG      180
AGTCTCCATG GAGTCTATTT TACAACCTCC TTTCCCTCCA TGCTTCCGCG GAGGAGTCTA      240
TACTATCTCT ATATACACAT TTAAACATT ATTCTTCATT TGAAATTCCT TCAATAAAAA      300
CACAGTCACC ATTCTTCATC TTCTTGGGAA ATGGCCTGCT CTCGAG          346

```

(2) INFORMATION FOR SEQ ID NO:1237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1237:

```

GAATTCGGCC TTCATGGCCT ACTCACTATG TTGCTCAGGC GGATGTGGAA CTCCTGGGCT      60
CAAGCGATTG TCCTGCCTTG GCCCCCAAAG TGCTGGGATT ACAGGTGTGA GTCATGGCAG      120
CCACGGCTCC AGAGCTCGGG TTCTTAATCT GGTCTGTGGA TGGCCCTGCG GGGCGGTCCC      180

```

ATGAGCCCCCT CACAATTGGA CACAGTTTTG CAAAGGGGTA AAAGGACAAG AATCGGTAGC 240
 TGTGACTGTG GATGAGCCTC TGAGCTTCAC TTTCCTCCC TGAAGGGGG TGACAGTGGC 300
 ACCCTCCCTGG AGGTTTTCGT GGAGGGGAGG AAACACATGT AAAATACTTC ACCCC 355

(2) INFORMATION FOR SEQ ID NO:1238:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1238:

GAATTCGGCC AAAGAGGCCT ACTAGACCTG ATCACCACGT TCAAAAGTTG GCTTCTCCA 60
 TTTTAAGTTC TTCCTTAAAG CCTCTTAAAG CAAAGTCCCT GAAATGATAC AGTAGAAAAA 120
 TCACACAGAC TTATTTAAAA TGAATCTAT CACTATTCCT GAGATCTCGC CTGCCCCACT 180
 GAGGACATTT TGTTTTCGCA AAGTGCTTTG AAATGTGATA AAGGATCTTA AAGAATATTT 240
 GTAAAATTAT GCCCAAAGAA GACATTCTTT GAGGTAACT TGCAGTGTCT AAAAGTCAAG 300
 AATGAGGAAG GAAAGGAAAA TAACAGATTCT ACTTTAAAT GGACCACGCT AATTGGGCAG 360
 TGAAACATCC TTGTGTCACA CCATTACCG TAGCAGACCA GAAGAGGGAA AAGGCTTGAT 420
 TTTTCTCTCA TAGATACCAC AGTTCACCTC CAAAAACATT CCTAAAATGG ATTGATATTT 480
 CTCTGATAGA GCACCTGTTT TGCTACTGAC AGTGTTAAGT TCCATACTAA TCAGCTCATC 540
 TAGCCTAACG ACAACTCGAG 560

(2) INFORMATION FOR SEQ ID NO:1239:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 569 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1239:

GAATTCGGNC AAAGAGGCCT AAGGAGAANG AGGCTCAGAA GGAGACGATT AAGGATCTTC 60
 CCAAGATGAA CCAGGAGCAG TTCATTGAGC TGTGCAAGAC GCTTTACAAC ATGTTTCAGTG 120
 ANGACCCCAT GGAGCAGGAC CTGTACCACG CCATCGCCAC CGTGGCCAGC CTCCTGCTCC 180
 GCATCGGAGA GGTGGGGAAG AAGTTCTCAG CCCGCACAGG CAGGAAGCCC AGGGACTGTG 240
 CCACTGAGGA GGACGAGCCA CCAGCACCCG AACTGCATCA GGACGCAGCC AGGGAGCTTC 300
 AGCCCCCAGC TGCAGGAGAC CCCCAAGCCA AAGCAGGCGG AGACACACAC CTCGGAACAG 360
 CCCACAGGA GAGCCAGGTG GTGGTGGAGG GGGGCAGCGG CGAGGGACAG GGCTCACCCT 420
 CCCAGCTGCT GTCTGACGAT GAAACCAAAG ACGACATGTC CATGTCCTCC TACTCGGTGG 480
 TCAGCACGGG CTCCTGCAA TGTGAAGACC TTGCAGACGA CACGGTGCTG GTGGGCGGGG 540
 AGGCCTGCAG CCCACAGCG CGACTCGAG 569

(2) INFORMATION FOR SEQ ID NO:1240:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1240:

```

GAATTCGGCC AAAGAGGCCT AGAGACCAGC CTGGCCAATA CGGTGAAACC CTGTCGCTAC      60
TAAAAATACA AAAATTAGCC AGGCATGGTG GCTCACACCT GCAGTCCTAG CTAATTGGGA      120
GGGTGAGGCA GGAGAATCAC TGAAGCTTGG GAGGCAGAGG TTGCAGTGAG CCAAGATTCC      180
ACCGCTTCCC TCCAGCCTGG ATGACAGAGT GAGACTCCGT CTCAAAAAAA CAAAAAAA      240
GTTACTTCAA TAATGTACTT TTTTTCCTCA AATTACAGAT AATCTATAAG GAATTAATCT      300
TGAAATTAAT TCCAGGTTTA ATTGTTAATG AAATTCACA AGCCTAATTT AACACTTGTC      360
TGGATAACTC ATTTTGATAC TGAGTAAATA GTCACCGGTC TCGAG                        405

```

(2) INFORMATION FOR SEQ ID NO:1241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1241:

```

GAATTCGGCC AAAGAGGCCT AGGGCTTTTG TGAATAAATT TTAAAAGAGA CTACTGCCTG      60
TCCTTAAATT CCTTTTCTT TTTATAAAAA AAGAACTATT AAAAATGATT GACAAATTTT      120
GAGTTAAAAA ATTGTTAAAA CATTCTCTAT ATTTAATTTT AATTTTATAA TAGATTACAG      180
GAAGATGCTT ATGAAACAAA TACATTTGTT TCAGTACATG TCTTTAAATG ATAGACTTAT      240
AAGTATGTAA ACAACTATAT AATAAAAGGT TTCCAAACGC TGCCTGTAAG AAATCAGGCA      300
AATTTTACCA TAAGCAATAA ACCATTCCAA GCCTTCCAGA CAGTCTCCAT AGCCGCACCA      360
GCATGGCAAT AAGCTTTAAC CAAACGAAAA CAAACAAACA AAAGCACTTC GCAATTTGTT      420
GCTGCAAAAC AGGGAGAGAA AAGAGTGATC AAACCTTGAT GAATCACAAAC AGTCAATATA      480
ATTTAAGGGA CAATAAAGTC AATAAGGTTG ATGGTGTTTA TTGTTTAAAA AGTTAGGCCT      540
CT                                     542

```

(2) INFORMATION FOR SEQ ID NO:1242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1242:

```

GAATTCGGCC AAAGAGGCCT ACTGATACAA TTGTTGACTT TTCTTTTACT ATGTGTAAGA      60
AATACCCCAA ACATGAAAAG ATTGTTTGA TCATATGCAT GTATGTAGAA TATTTTGGCA      120
GAGCAGAAAG ATTATGTTAG AAGTGTGATT TTTATTTTCA GAAGTCATAT ACATGTAAGC      180
TACAATTTTG AGTGCTTTAT AAACACTTAA GATATATATA TAAATTTTAA TTTCATAGCA      240
ACTTGTAATA AATAAAATAC TTGTTGAAAA GCCTTTTTC AATATCCCT AAGCTAAGGG      300
AAGAGGAAGG AATAACAACCT CAGTGAAAAG ATGGTCTCCA GTTCTGAAT GAAAAAGCTA      360
CAACCTCGAG                                     370

```

(2) INFORMATION FOR SEQ ID NO:1243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1243:

GAATTCGGCC	AAAGAGGCCT	AGCCTCATCA	CGGCGAGGCG	TCTGGCCCAT	AGTGGCTGGA	60
CAGACACTGG	CACAGTCTTG	CTGGTCTGCT	GGGAGCACAC	AGACATTGGC	ACAGACTTGC	120
TGGTCTCTTG	GAAGAGGGCA	AGACCCAAA	CCAGAGCAAA	ATACACTTCC	AGCTCTTAAC	180
CAGGCTCCTT	CCAGTCACAA	GTGTGCAGAA	TCAGAACAGA	AGTAGTACCA	ATCAATGTCA	240
CATGAACAAA	CAAGCTGCCC	CCAGGGTACC	ATTGGGGGAG	GGGAAATCTT	TTCTTTCTTT	300
CCCCCTTAAA	AAAAAACACA	TCTGCCCGA	ACACTTTCCC	ACTGTTATTC	TTTCCTCATA	360
CCCCAACGCT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:1244:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1244:

GAATTCGGCC	AAAGAGGCCT	ACACACCAAA	CTGATTATCC	ACCAGACACT	CAGCGTCTTA	60
GAAGATATTG	TGGAGAATAT	CTCGGGGGAG	TCCACCAAGT	CTCGACAGAT	TTGCTACCAG	120
TCGCTGCAGG	AATCTGTTCA	GGTCTCCCTG	GCCCTCTTTC	CAGCTTTTAT	CCATCAGTCA	180
GATGTGACTG	ATGAGATGCT	GAGCTTCTTC	CTCACTCTGT	TTGAGGGCCT	TAGAGTACAG	240
ATGGGTGTGC	CTTTCCTGA	GCAAATCATA	CAGACTTTCC	TCAACATGTT	TACCAGAGAG	300
CAGTTAGCCG	AGAGCATCCT	CCACGAGGGC	AGCACAGGCT	GCCGGGTGGT	GGAGAAAGTT	360
CTGAAGATCC	TGCAGGTGGT	GGTCCAGGAG	CCAGGCCAGG	TGTTCAAGCC	CTTCCTCCCC	420
AGCATCATCG	CCCTGTGCAT	GGAGCAAGTG	TATCCCATTT	CGCTCGAG		468

(2) INFORMATION FOR SEQ ID NO:1245:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1245:

GAATTCGGCC	AAAGAGGCCT	AAGCTTATGG	GGAGGACACA	TATTTACTCA	AACATCCTGG	60
CAATTCATAT	CTAGGGCACT	CCCTCTGTGT	GTGACAGGCC	CTTGACATGTG	TCAAATGTCA	120
TCTGATAACA	TTGATGAAAA	ATATCATTCA	CTTCTTCTTG	GTGAGAAGG	CATAGACCGG	180
ATTATGCAAT	CACTGAGAAG	TAGCTTCTGG	ATGTGTTTTC	TGGTGGCGTC	TTAACAATTT	240
CAGCCGACTG	AAGGCTCTTG	GACACTTGGA	ACATTTGTAG	GGTTTCTCTC	CGGAGTGGAT	300
GCGCTGGTGC	TCCTTCAGGC	TCCCCCTGTA	GGTGAAAAC	TTCTTGCACT	CTTTACATTC	360
GAAGGGCTTC	TCCCCCTGTG	TGGCTTCTCT	TGTGACACTT	CAAGTAGGAC	TTCTGGGTGA	420
ACTGCTTAGG	CCTCTTTGGC	CGAG				444

(2) INFORMATION FOR SEQ ID NO:1246:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 431 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1246:

```
GAATTCGGCC AAAGAGGCCT AGTATTTTGT ACTAGTTTTT TAATAATTAT AAGTCTTACA      60
CGTTCTCTAA TTCTTCTTGA ATCTGTTTAA TTTTCTCCCC TTGGGAATTG TTAAGTGTAC      120
ATGTATTGTG ATAACGTGTA TAATTTTGCT TTTATTGATT TTTTGTGCTT TATATCTGCT      180
ACAATTTGGT TCCTCCAAAT CCCATGTTGA AATCTGATCC CCAGTGTGTC TGGGGGATCT      240
AATAGCAGGT GTTTGGGTCA TGGGAACAGG TCCCTCATGA ATGAATTAAT GCCCTCACTG      300
GGAGGAGGGG ATAAGTAAGC TCTCACTCAT TTAGTCCCA AGACAGCTGG TTGTTTAAAA      360
GAGCCTAGTG CCACTTCTCT CTTGCTTCCT TTCTGCCGT GTGATCTCTG CACATGCCAG      420
CTCCCCTCGA G                                     431
```

(2) INFORMATION FOR SEQ ID NO:1247:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 389 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1247:

```
GAATTCGGCC AAAGAGGCCT ATTTTTTTTT TTTTTTTTTT TTTTTTTTTT TCNGGGTGTA      60
GAACATTATAT TTATTTTTC CACAAATCAC TGAAAGTTTA GGTGAGTGGG AAATAATTTT      120
AATCAAATAA TTGTACATAT TCTTCCACA TATCCTGCCT TGTATTAGGA AATGACATTG      180
TGATCCATTT CATTACAAGT AAAATATTAC AAAATATTTA CAGGAAAATA TTAATAATAA      240
CTCAAACACA AAAGGCAAGA TGAAATAAAC TGTTTTTTTT TCTCCAGAAA TCTCTACTCC      300
AGTGCCACACA GCACACAAGA GTCAAAACAA ATAAGCAACT AAGATCCCCC GATCACAAT      360
TTCCAAAGAA CTAGGCCTCT TTGGCCGAA                                     389
```

(2) INFORMATION FOR SEQ ID NO:1248:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 380 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1248:

```
GAATTCGGCC AAAGAGGCCT AAAGGAAGGC CACTTCTCAA CTGGCAGAAC TTCTGAAGTT      60
TAGAATTGGA ATTACTTCCT TACTAGTGTC TTTTGGCTTA AATTTTGTCT TTTGAAGTTG      120
AATGCTTAAT CCCGGGAAAG AGGAACAGGA GTGCCAGACT CCTGGTCTTT CCAGTTTGA      180
AAAGGCTCTG TGCCAAGGAG GGACCACAGG AGCTGGGACC TGCCTGCCCC TGTCTTTTCC      240
CCTTGGTTTT GTGTTACAAG AGTTGTTGGA GACAGTTTCA GATGATTATT TAATTTGTAA      300
ATATTGTACA AATTTTAATA GCTTAAATG TATATACAGC CAAATAAAAA CTTGCATTA      360
CTTAGGCCTC TTTGGCCGAA                                     380
```

(2) INFORMATION FOR SEQ ID NO:1249:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 386 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1249:

```
GAATTCGGCC AAAGAGGCCT GTTGGTTTG TGA TAGACT TAAAAATACT AAAATAAGCC      60
AAATAGATGC TAACAATACT AATTGCACA CAAGATTGTA AAAAAGTACT TCAAGTTTTA      120
TCTCTTATCC CTAGAGAAAG TAAATAAAAA GTGGCTCTTG CAAAAATAAA TGAAAACAAA      180
ACCACCAACA AAAACTAATC ATATAAGATA CTGTTTTTCT TTTTGAATAC TTCAATTGGT      240
CCTATATTAG GATAAGGTTT TGATAGCAAG GACTTCCTAG CTTCTTCCTT TATCTTCCAT      300
TCTCTAGTCA CTTCCGTGTT TTTATCAAAC AAGGCTACGT GTAGGCTTTC CTACAAAGTC      360
AGATTGAATT CTACCACCCT CTCGAG
```

(2) INFORMATION FOR SEQ ID NO:1250:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 428 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1250:

```
GAATTCGGCC AAAGAGGCCT AACCATGTCT GACCAGATCA TTGGGAGAAT TGATGATATG      60
AGTAGTCGCA TTGATGATCT GGAAAAGAAT ATCGCGGACC TCATGACACA GGCTGGGGTG      120
GAAGAACTGG AAAGTGAAAA CAAGATACCT GCCACGCAAA AGAGTTGAAG GTTGCTAATA      180
ATTTATACTG GAATCTGGCA TTTTCCAAG CCAAGAGAAG ATCGAATGGC TTTTTCAGC      240
TAACTACTAT GTGTAGACAG GTTTTATATT ATAAAGTATG CATTCTTATC ACCTAGTATA      300
TAGTTAGTTT GTAGAGTGAT TTCCCCCAG TTTCTTGAAC ATGGTATCTT CACATCTTGG      360
ACCTTGGTCA GTTGTGCTAT TCATTATTAA AACTAAAAAC TTTGGCGGTT TAGGCCTCTT      420
TGGCCGAA
```

(2) INFORMATION FOR SEQ ID NO:1251:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1251:

```
GAATTCGGCC AAAGAGGCCT AAGAAAAGTA GTATGAATGA GTTTTCTAC ATATTA ACTA      60
CAATTTATGG TAATTTGTGA AATGTTTTTC CATTTTAAA TGTAAGAGTC TCTATCTCCA      120
CTCACAAGC AACAGGCACT GCTAGGGGTC TTAGGCTAAC ATCTGCCACC CCACGACTCT      180
GCATGGCCCA TAAACAGGTG CAGAGGACCA GAGTTCACCT GTCAGCAGCA CCGCAGAATC      240
CAACTCTAGG CCTCTTGGC CGAA
```

(2) INFORMATION FOR SEQ ID NO:1252:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1252:

```

GAATTCGGCC AAAGAGGCCT ACTTTTTTTT TAATTTTCCA CTTTCTTCTT AACTTTACTT      60
CTCTTTTGTG CCCCCCAT CTTACAGAAG TTGAGGCCAA GGGAGAATGG TAGGCACAGA      120
AGAAACATGG CAAACTGCTC TGTGCTTTCA AACCAAAGTG TTCCCCCAA CCCCAAATTT      180
GTCTAAGCAC TGGCCAGTCT GTTGTGGGCA TTGTTTCTA CAACCAAATC TGGGTTTTTT      240
TCTTCTTTCT TTAAACATAG AGGTACCACC ACAAGGGATG CCCTACTCTC TCGCAGCTCT      300
TGAAAGCATC TGTTTGAGGG AAAGGTCTCT GGGCAAGCAA GTGGTTATTT GGATTGCTTG      360
CTTCCCTTTT TCCACCTGGG ACATTGCAAT CATAAAATAA CAGTAAATTC CAAACCTCTA      420
GGCCTCTTTG GCCGAA                                     436

```

(2) INFORMATION FOR SEQ ID NO:1253:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1253:

```

GAATTCGGCC AAAGAGGCCT AGGGTAGATC ACTTGATATC AGGAGTCGAG GCGGGAAGAT      60
CACTTGACGT CAGGAGTTCG AGACTGGCCC GGCCAACATG GTGAAACCGC ATCTCCACTA      120
AAAATACAAA AATTAGCCTG GTGTGGTGGT GGGCACCTGT AATCCCAGTG ACTTGGGAGG      180
CTAAGGCAGG AGAATTTCTT GAACCCAGGA GGCAGAGGTT GCAGTGACCA GCAAGGTTGC      240
GCCATTGCAC CCCAGCCTGG GCGATAAGAG TGAAAACTCC ATCTCAAAAA AAAAAAAAAA      300
AAATTCCTTT GGGGAAGGCCT TCTACATAAA AATCTTCAAC ATGAGACTGG AAAAAAGGGT      360
ATGGGATCAT CACCGGACCT TTGGCTTTTA CAGCTCGAG                                     399

```

(2) INFORMATION FOR SEQ ID NO:1254:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1254:

```

GAATTCGGCC AAAGAGGCCT ACCCGGTACT TACTTCTCAA TCCTAAAGAG AGAAAACAGG      60
TGTTTGATCA GTATGTAAAG ACCAGGGCAG AGGAAGAACG CAGGGAAAAG AAAAATAAAA      120
ATGCAAGCCA AGGAAGATTT CAAAAAATG ATGGAAGAAG CAAAATTTAA TCCAAGAGCA      180
ACTTTTAGTG AATTTGCAGC CAAGCATGCT AAAGATTCAA GATTCAAAGC AATTGAAAAG      240
ATGAAAGACC GAGAAGCCTT GTTTAATGAG TTTGTGGCCG CTGCTAGGAA GAAAGAGAAA      300
GAAGATTCTG AGACCAGAGG TGAGAAGGTA AGATGGTTTT AGTTCCAGTG GTGTGATTGA      360
TGGGAGTGTG AATGGGAAAG GTCTATGCTG GTGTTATGTT TCTAACCTTA TTCATTGGCA      420
TAAATAATAG GACGTACACT CGAG                                     444

```

(2) INFORMATION FOR SEQ ID NO:1255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1255:

```

GAATTCGGCC TTCATGGCCT AAGAAGGACT ACCCTGCACT GCTTTCCTTG GATGAGAATG      60
AACTCGAAGA GCAGTTTGTG AAAGGACACG GTCCAGGGGG CCAGGCAACC AACAAAACCA      120
GCAACTGCGT GGTGNTGAAG CACATCCCCT CAGGCATCGT TGTAAGTGC CATCAGACAA      180
GATCAGTTGA TCAGAACAGA AAGCTAGCTC GGAAAATCCT ACAAGAGAAA GTAGATGTTT      240
TCTACAATGG TGAACACAGT CCTGTTTACA AAGACAACT CGAG                          284

```

(2) INFORMATION FOR SEQ ID NO:1256:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 691 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1256:

```

GAATTCGGCC TTCATGGCCT AGTGGGAGTT TGCTAATGTG AAACCTAATG ATGTCTGAAA      60
ATGGTCCTGA TGGGTATTAA TAGCCATCTG GAAAAATTTT ACATCTTCAC AAATAATCCC      120
AATAATTTAT ATTGTGAAGA TATTATCCTG ATAGTCCTTC TTTTCCTATA TTCTTGTCGG      180
CTGTAGGATG AGAGCAGTAT GAAGCAAACA GAAGACATTT TGAAATTAAT CACAAAATTC      240
CCATTGCTTT GAAGCCTGCT ATTATTATAC TAAGCCTTCT TATAGCTTTA AAAATCAAAC      300
AATGCCAAAC AGTATATCTA ACATTTTTAA TTTCTTTTGA GCCAAACCAA TTTGGTTTAA      360
ATTTCTCTGC CTCGTGAAG ACAAGCTGGG CTGGGGAGGA CGGTGTCTAG GAGGGATGAC      420
CCCCTCAGC TCCAGGCAGT GTTCTGCCGA GACCCCAAGA ACTCGGGGTG TCAGAGGGCA      480
AAGGAACTAC CTGCCTTTCA CGGCTGCTGA CTTCTCAGGG CTGCAAGCAG CACAGAATGT      540
TATCCTTACG TCCTGAGCCG GTTTAAGTCT GTGGAAAAGG AAGCACGGGA GAAATCCACG      600
TAACCTTTGC TTTCTTTTAA AGGGAAGCGG TCCGCCGTG AACTTGGAAC CCTCAGCTCC      660
GGGTGTTCTC GGCAGAAGGG CAGCTCTCGA G                                691

```

(2) INFORMATION FOR SEQ ID NO:1257:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1257:

```

GAATTCGGCC TTCATGGCCT AAGCTGATCC ACGATCAGAG TGCTCCAGC TGCCCCAGCA      60
GCTCCCCGTC CCCAGGGGAG GAGCCTGAGG GGGAAAGGGA GACAGATCCG GAGAAGGTGC      120
ATCTCACCTG GACCAAGGAC AAGTCGGTGG CAGAGAAGAA TAAGGGCCCC AGTCCTGTCT      180
CCTCTGAGGG CATCAAGGAC TTCTTCAGCA TGAAGCCGGA GTGGGAGAAC TTGAACCACT      240

```

CCAACGTGCG GCGCATGCAC ACGGCCGTGC GGCTGAACGA GGTTCATCGTG AAGAAATCCC 300
 GGGACGCCAA GCTTGTTTTG CTCAACATGC CTGGGCCTCC CCGCAACCGC AATGGTGATG 360
 AAAACTACAT GGAGTTTCTC GAG 383

(2) INFORMATION FOR SEQ ID NO:1258:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 418 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1258:

GAATTCTGAG GGAATACTA CGACCATGAG ATTGGCAGTG ATTTGCTTTT GCCTATTTGG 60
 CATTGCCTCC TCCCTCCCGG TGAAAGTGAC TGATTCTGGC AGCTCAGAGG AGAAGAAGCT 120
 TTACAGCCTG CACCCAGATC CTATAGCCAC ATGGCTGGTG CCTGACCCAT CTCAGAAGCA 180
 GAATCTCCTT GCGCCACAGA ATGCTGTGTC CTCTGAAGAA AAGGATGACT TTAAGCAAGA 240
 AACTCTTCCA AGCAATTCCA ATGAAAGCCA TGACCACATG GACGACGATG ATGACGATGA 300
 TGATGACGAT GGAGACCATG CAGAGAACGA GGATTCTGTG GACTCGGATG AATCTGACGA 360
 ATCTCACCAT TCCGATGAGT CTGATGAGAC CTTCACTGCT AGTACACAAG CAGTCGAG 418

(2) INFORMATION FOR SEQ ID NO:1259:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 189 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1259:

AAAAATTAAA TAATGCTTGA CTTTTTTTTT TTTTTTCTC TTTTGTAGGC AGGTTCTTGC 60
 TCTGTCACCC AGGCTGGACT GCAACAGCAT GATCTTGGCT CACCTCCGCC TCCCAGGCTC 120
 TGGCAATCCT CCCACCTCAG CTTTCAGAGT GGCAGAGACT ACAGGCTCAT ACCACCGCAC 180
 CCACTCGAG 189

(2) INFORMATION FOR SEQ ID NO:1260:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 278 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1260:

GCGATTGAAT TCTAGCCTTT CCTCCGTTCA AGTAAATTTA GAAATTCCT AAGTTTTCTT 60
 TATAACAGGT AGCCTAAATC TATATCATAC TTTTAAATA AAAATCTAGG TGCAAATTTG 120
 TTCTTATGGT TAAGGTTAAC ATGTACACTT CACAAACATT GAGACTTTTG TTTTGTTC 180
 TGGGACAAGG TCTTGTCTG TCTCCAGCT GGAGTGGATA CAAGCATGGC TTGCTTCAGC 240
 CTCAACCTCC CGGACTCAAG CGATCCCCC CCCTCGAG 278

(2) INFORMATION FOR SEQ ID NO:1261:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1261:

```

GAATTCGGCC TTCATGGCCT ACTCACTGGA TGCTGGGGGA GGGCCCCTCA GGTGAGCAGC      60
CCACCACTGA CTTCAGCGTT GCTGGCTCGG TTATCAGACT CTCATCCAAC ACAAGCTCAC      120
AGGGAAAGCC GTTCCTTGCT CCTGTGGAG GGAGCTACCG TCATTGCCCT GAGACCACCA      180
GCCAAGAAAG TAGGTATGTC CAGGTAGGGA ATTCAGAGGG ACCCAGTGCA TCCAATTATA      240
CAATTATACC CAGAAAGTCC TCGAG                                     265

```

(2) INFORMATION FOR SEQ ID NO:1262:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1262:

```

GGTCAGTATT GAAGGTTGTT TTCTGAGCCA TTGTATGAAG CTGCTGTTTT GGCGTCCCTA      60
ATGCAGGGTG AGATGGTAGT GTGATTCTTG TTGTGACATC TCGTGA CTGG GCAGGACGCT      120
GAATACTGAT TGCTGCAGAT GGAGGATGCT GGATAGACAA GGTGGCCCTA CTAAGTGCTG      180
AATCAGTAGC ATGCGCCGCT GTCGTAGTGA TGA CTGGAGA CTGAGCTCTG GTGGCTGAGA      240
CAGTTGCTAC CACAGCAGGA GGGATGGCAT TGGAGGTGGT CACAGGTGGC CGAGACTGGA      300
TTGGTTGGTG AATGATGTGC TGTACTGCTG GCTGAGCAGT AGCAGCATTT GGCAGCTGTG      360
AGGTCGGCCT CAGGACTGTG GTTACTTTAG AACTGGACAT CACAGCAGCA GCAGCTGCAC      420
CTCGAG                                     426

```

(2) INFORMATION FOR SEQ ID NO:1263:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1263:

```

GAATTCGGCC TTCATGGCCT AGGCCGGTGT TTATGCACGA TGGCGTTGAA AGCTAGTCCA      60
TCTCTCCAGC TGGTGGTGAA GTTGTGTACA TTGACGTTGG GATAACCTGC AGTCTTCATC      120
TGGCACCACA GAAGCAGGGC ATCCTTGGCT GACTTCTTCT CCTTGTGTC TTCTGTCTCC      180
ACACTGATGT CTTGGATCTG GAATCGAAGG ATGATGGTCC AGACCAGCCC AAGGGTCAGT      240
CGGTGGTTTC CGTCCACAAAT GTCATGGGAG CCCATGTTTT CCAAGTGCAC TTTCTGCTCC      300
TTGAGGAACT GCAGTGCCTT GTCCACGTTT TCCAGGCAGT GGATCCGCAT GCGGCCCTTT      360
GTAGGCTTTG GCAGTATCTC TCCGAGAGC ACCTCGAG                                     398

```

(2) INFORMATION FOR SEQ ID NO:1264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1264:

```

GAATTCGGCC TTCATGGCCT AAAAAAGCT GTTAAGAAAA TATGTTTAA AAATTTGCC 60
AACAGGAAGG AGAAAATTAG AATCTAATAG CAAACTTGTG TCAAAGCAGG GGAGACCACA 120
TGATCTTCCT CTTTGAAAAT CTGTCCTGGG TGATGACCAT ATGCTCTCTA AACAGGTTTT 180
CTGTGTTTTA GGGAAAGAAG CTCAGAAAGG ACCCTTGCTC TTTGATGACC TCCCTCCGGC 240
CAGCAGTAAC CTCGAG                                     256

```

(2) INFORMATION FOR SEQ ID NO:1265:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1265:

```

GAATTCGGCC TTCATGGCCT ACAGAGTCTA ATTAGCCATA TTTATATGAT AATAATAAAC 60
ATTTTGGCTA CAGTCCTACC TAGATTTTTT TTTTITAGAT GGAGTCTTGC TCTGTGCCCC 120
AGGCTAGAGT GCAGTGGTGC GATCTTGGCT CACTGCAACT TCTGCCTCCC AGGTTCAAGC 180
AACTCTGTTG CCTCAGCCTC CCAAGTAGCT GGGATTACAA GCGCACATGA CCACGCCTGG 240
CAGCTCGAG                                     249

```

(2) INFORMATION FOR SEQ ID NO:1266:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1266:

```

GAATTCGGCC TTCATGGCCT AGGTTATATA GCAGTGATGC TTTCATAGTA TTTTCTTGA 60
ATAAGGTCCC CAAAACCTTA TTAAGTTCCT GGTAGGCATG GAGCATTGAA GATGGCAGAC 120
ATGGTGAGT CTCTCAAGGA GTTTACGCTC TAGTGGAGAA AACAATCAGA CAGCCTTAAA 180
ATACATGTAT GGCTACTATA ATAAATACTG TGAAGCAGGA GTGCACCACG AACCTGGAG 240
TCCTCTCCAT CCTCCCCTTC TCGAG                                     265

```

(2) INFORMATION FOR SEQ ID NO:1267:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1267:

GAATTCGGCC TTCATGGCCT ACTAGACCTG CCTCGAGATT AGGGGGGTTA GACTCAGAAT	60
TCTGTCCAAA CTCCTGGACG ACCTCTTGAA ATTAAGTCAG GGATTTTATG TACTGGGTGA	120
ATTTCGTAAC CTCTGGGTAT AATATTAGGT TTGCATGTAG AAAGGGTCTC CAGTATAGGA	180
CTTCAAAGAA ACTAAGCCAT AGACGTAATT TAAGGGCTGT TCTGATCTGA AGAAGTGCCA	240
TGGGTAGAAG TTTTAGCCAT GGTAAGAGG CTTCTGGCA TCATTGCTC GAG	293

(2) INFORMATION FOR SEQ ID NO:1268:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 501 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1268:

GAATTCGGCC TCATGGCCTA CTGGTCCAAG CTGATTACCC TCATAGTGTC CATCATTGAG	60
GAAGACAAGA ATTCCTACAC TCCCTGCCTC AACCAGTTTC CCCAGGAGCT GAATGTGGGT	120
AAAATCAGCG CTGAAGTGAT GTGGAATCTG TTTGCCCAAG ACATGAAGTA CGCCATGGAG	180
GAGCAGACA AGCATCGTCT ATGCAAGAGT GCCGACTACA TGAACCTCCA CTTCAAGGTG	240
AAATGGCTCT ACAATGAGTA TGTGACGGAA CTTCCCGCCT TCAAGGACCG CGTGCCTGAG	300
TACCCCTGCAT GGTTTGAACC CTTCTGCATC CAGTGGCTGG ATGAGAATGA GGAGGTGTCC	360
CGGGATTTC TGCACGGTGC CCTGGAGCGA GACAAGAAGG ATGGGTTCCT GCAGACCTCA	420
GAGCATGCCC TATTCTCCTG CTCCGTGGTG GATGTCTTCT CCCAACTCAA CCAGAGCTTT	480
GAAATCATCA AGAAACTCGA G	501

(2) INFORMATION FOR SEQ ID NO:1269:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1269:

GAATTCGGCC TTCATGGCCT AGGCCCTGC TCCACCTGGG GGGACTGGGA GTGTGAGTGT	60
GCATGGCATG TGTGTGGCAC AGATGGCTGG GACGGGTGAC AGTGTGAGTG CATGTGTGCA	120
TGCATGTGTG TATGTGTGTG TGTGTGTGGC ATGCGCTGAC AAATGTGTCC TTGATCCACA	180
CTGTCCTGG CAGAGTGAGT AACCCAAAGG CCCCTTCGGC CTCCTTGTAG CTGTTTCTT	240
TCCTTTTGT GTTGGTTTA AAATACATTC ACACACAAAT ACAAATTGAC AGGTCAAAAT	300
CCATGAAATG AGATCCCCCA GCGGCTCGAG	330

(2) INFORMATION FOR SEQ ID NO:1270:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 502 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1270:

```
GAATTCGGCC TTCATGGCCT AAAAAAAAAA TACTGATTCA CTTTGCAAT TTTTCAGATA      60
CTACTTGATG TGACACCTCC CTTAGGCTTG CTGTGGGTCT CTTGGAAGAT AGAGCTATAT      120
TAACTCCTTG ACTTAAAGGG CAGCAGACTA TATAAGGTCT CTTTACAGAC AGAGTAGGGA      180
GAATAATGAA AAACCTTTTG ATTTCTAGAG AGAAGAGAGA AGACATAGCA ATGGAAGTGT      240
TCTTAGCTTT GTTTGCTACA ACTCTTCAAA GTTTAATTTT AGATTCAGTG CATTATTTCA      300
TAGAGCATGA AACATATAAT CATGCCTTTT ACTAATTGCG GATACTTAAA ATTATATATT      360
TTTGACCTAC TGTGTTATGG TCAATTTGAA AAAGAATGGT TTGATTATAT ATTATTGTCT      420
GTAGATTCCC TGTACTATTC TAGGATCATA TGACATATTA TCATTACTAA ATATAGCACT      480
AATTATTGAT GCTCCGCTCG AG                                         502
```

(2) INFORMATION FOR SEQ ID NO:1271:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 285 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1271:

```
GAATTCGGCC TTCATGGCCT ACCCCTGACT ATTCAGTAGG AGAAGAAATC AAAAATCCAT      60
TCTTTTGTCC TTCTCTCCCT CCAACAGTGG CCAGGGGAAG GGAAGTGAG GGCAGGGGCA      120
AAAAGATTG GGAATTTTTA TTTATTTATT TATTGTGACT TTTCATTTT TTGGTATTG      180
GCTTTACTGG AATAGGAGGG CCCCTGCCCA CTGTGCCCCG TTTATCCCTT ATTCCCCAAA      240
CCCTGTCTC CCCAACACCT ACTCACTTAA GCACTTGTC TCGAG                                         285
```

(2) INFORMATION FOR SEQ ID NO:1272:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 405 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1272:

```
GAATTCTAGA CCTGCCTCCA ATTTGAAGAT TTATTCTCT CTTTGATAT AGAACAAAAT      60
AACTTTATGT ACATTTTATT TCACTTTATT TTACTATTGG GTTGGTGCAA AACAAATTGC      120
AGTTTTCCCA TGAAAAGTAA TGGCAAAAAC TGCAATTACT TTCGCACCAG CCCAATATTT      180
TATTTTGAGA CAGAGTCGCA CTCTGTCACC AAGGCTGGAG TGCAGTGGTG TCATCCCAAC      240
TCACTACAGC CTCTGCCTCC TGGGTTGGAG AGATTCTTGT GCGTCAGCTT CATGTGTAAC      300
TGGAATTACA GGTGCACGCC ACCACGCCA GCTAATTTT GTATTTTTTG TAGAGATGGG      360
GTTTCGCCAT GTTGCCCTGG CTGTTCTCAA ACTCCTGACC TCGAG                                         405
```

(2) INFORMATION FOR SEQ ID NO:1273:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 412 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1273:

```

GCGATTGAAT TCTAGACCTG GCTCGAGGCA GGTCTAGAAT TCAATCGGCT TCCTGGCAGT      60
GCCCTCTCCC AGATGAGACC TGATCTCTTT TTTGTTTTTT GTTTTTTGTT TTGAGACAGA      120
GTTTGTGCTCT TCTTGCCAG GCTGCAGTGA GTTGAGATCG CACCACTGCA CTCCAGCCTG      180
GGTGACAGAG TGAGACCCCA TCTCAAAAAA AAAAAAAAAA ATCTGGCCTT ATGGACTGTG      240
TACTACACTC TAGTGGGGGT AAGAGGCAAT GGGTAAATAG GTAAGTAGAT TATTGGATGT      300
ATTAGAAGGG GCATGGGGAA TGTGGGGTCA AGGTTATAGT TTTAAATAGG GTGGTCAGGG      360
AAAGCTTTCT GAGAAGGTGA CATTTGAAAC AAATACTTGA AGGAGTCTCG AG              412

```

(2) INFORMATION FOR SEQ ID NO:1274:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1274:

```

GAATTCGGCC TTCATGGCCT AGCTATTTTT AAACAATATC TGAGATTATT CATTCAACTA      60
AACTTATTA AGCATTTAAT ATCTGTCTGG CATTCTTCAG GCACCAAGGA TATTTCGTTG      120
AACAAAACAA AATCTTTGTC ACTATGGAGT TTACGTTTTG TGGTGGCATT GGAGTGAAGA      180
GCTAGGGGAAT AAAAAACAA GTCAATATGT AGTATGCCAC TTGGTGGTAA GTCATTGGGA      240
GAATGATGTA GTAGGGAAAG AGGAAAAGGG TGTAGGCATC TCGAG              285

```

(2) INFORMATION FOR SEQ ID NO:1275:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1275:

```

GAATTCGGCC TTCATGGCCT ACTCCACACA TTCATCTCCC AAAGGACTCC TTGAATATTT      60
GCCCCAAAAC ATCAGCTCCC AGAAAACACC CCTCCCAGTC ACACACACAC CCAAATTCTC      120
CGATGTATTT TCATTTTTTT TCTCCTCTTC TCTTCTCTTT TTCCTTCCTT CCTTCTCTCT      180
TTTCTCTCTT TCCATCCCTC CCTTCCTTCC TCCCTCCCTT CCTTCCTCCC TCCCTTCCTT      240
CCTCCCTCCC TCCTTTCCTT CCTCCCCCA CCCACTCGAG              280

```

(2) INFORMATION FOR SEQ ID NO:1276:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1276:

```
GAATTCGGCC TTCATGGCCT ACGAGTGGTG CGATTTTTTT TTCTTAGCTT ATCAGCTATG      60
GTTAGTGTTA GCGTATTTTA TGTGCGGCCC AAGACAATTC TTCCTCTTCC AGTGTGGGCC      120
AGGAAAGCCA AAAGATTGGA CACCCCTGGT AGAGGCAGAA ACTCACTGGG TTAGTTCAC      180
AGCATCTGAT CAAAGATATG AGGCCAAAGA GCCTCTCGAG      220
```

(2) INFORMATION FOR SEQ ID NO:1277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1277:

```
GAATTCGGCC TTCATGGCCT ACGAGCTGAG ATTGCGCCAC TGCACTCCAG CCTAGGCAAT      60
AGAGTAAGAC TCCATTTCAA AAAAAAAAAA AAATGTTGAT CAAAAGAAGC CAGATGACAG      120
AGTACTCACT GTGTGAGTCC ATTTATTTGA AATTCTAGAA CAAAAAATAA ATATCCATTG      180
ATAGAAATGG GAACAGTGTT GGCCTATGAA GAATGGAAAT TGA CTGGAAG GAGGCCTCTG      240
CTCGAG      246
```

(2) INFORMATION FOR SEQ ID NO:1278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1278:

```
GAATTCGGCC TTCATGGCCT AGCTGGGCGT GATGGCGGGC GCCTGTAGTC CCAGCCACTC      60
GGGAGGCTGA GGCAGGAGAA TGGCGTGAAC CCGGGAGGCG GAGCTTGCAG TGAGCCAAGA      120
TTGCGCCACT GCACTCCCGC CTGGGCCACA GAGAGAGACT CCATCTCNAA AAAAAAAAAA      180
GAAAGAAAAA AAGAAAAATAA ACAAAGAAAA AATTAAGATT TTTGAAATAA AAACAAATAT      240
TAAAAATTAT TGAAATATAT TGAAAGTTTT TTCACCATAT ATATTTACCT TTTAAAAGGA      300
TATGAATTCA ATTATTTTAT TTGCTTATGG AAAATAGATC CACTGCTCTA AGATGCTACT      360
AATCATGCTC AGAGGATTCA CAACAAACAG ACTGATAAGG TATTACTTAA AGCGCTCTAC      420
ATTAAATAGA GCATTCCAGT TTTCTAGGGC ACACTACTTG CTGTATTTCC AAGGTCAAGC      480
AAAATAGCTT TCGTTCGAG      499
```

(2) INFORMATION FOR SEQ ID NO:1279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1279:

GAATTCGGCC TTCATGGCCT AATGAGCTAA AAGCAGTGTC ATCTCCGCAT GTTGGAGCAG	60
CCAAGAAATA GTTTGGTACT ACCGACATTG TCTAATCCAT GTCACATCCT CATACAATTT	120
AATTGCTCAA CCATGCATT AAAACTCCTC AAGAAAGGAT TGGTACTGCA ACTGTAGGTA	180
AACTGAAAAA AAATAAGAAA GAAAGAGTTG GATGAAAAATG TGAAAGCCCA AGTTTATAGT	240
TGCATTAAGT ATTAAATAGC ACAGTATCTT CTTCATGGAG CCTTTTTC TCCCCCATCC	300
CCTGCAGCTA CCTCGAG	317

(2) INFORMATION FOR SEQ ID NO:1280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1280:

GAATTCGGCC TTCATGGCCT ACTTCCTTTC ATTTTGAAGC AACAGTTTAT AAACAGGAAA	60
GTCTACTGGT TTCATAGAAT CTGTCAGATT TGCTTATTG CTACTGGTTT CACGCGCGTG	120
GACTATATTC CAGTGTTTCT AGTCAAAGAC CTTTATCCTC AAATCATGAG ATTAGAGTAA	180
AACAACTGCT GTAAGGTTGA GCATTCATG ACCAATGACT ATGAAGGCAC ATTCACCAAA	240
CACAGGCACT TTAAGGGCAT CCTTGATTAA TTTGCTAATT GCTATTTTTT GTTGGTATGT	300
GAATTCCTGC TAGGAGGCCG AGGCTAGTAG GCAATGAAAA AGACAGAACA ATGGTAAAT	360
GCAGCCCCCG TCCTCTACAA ATTGACAGTA TAATTTAGGG GCTCGAG	407

(2) INFORMATION FOR SEQ ID NO:1281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1281:

GAATTCGGCC TTCATGGCCT AAGATTGACA AAGAAATAGA GCTTCACAGA ATTCTTCATC	60
ATAAGCATGT AGTGCAGTTT TACCACTACT TCGAGGACAA AGAAAACATT TACATTCTCT	120
TGGAATACTG CAGTAGAAGG TCAATGGCTC ATATTTGAA AGCAAGAAAG GTGTTGACAG	180
AGCCAGAAGT TCGATACTAC CTCAGGCAGA TTGTGTCTGG ACTGAAATAC CTTCATGAAC	240
AAGAAATCTT GCACAGAGAT CTCAAACTAG GGAACCTCGA G	281

(2) INFORMATION FOR SEQ ID NO:1282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1282:

```

GAATTCGGCC TTCATGGCCT AGTAGTTTAT TATATAGAAA TTATTTGTCC TTGTCTTAGT      60
TGTGCCCTTT GACTCAGCAA TTCCCCTTCT ATAAAAATTT CCCAAGCAGA TGATTATGGA      120
TATATGCACC AATTGGGAAA CAGGGATGTT TATTGTTTAT AGTAGCACTC AACTGAAAAC      180
AACATAGTTG TCTTCAGGAG CGGGGACTGA TTAAATTATG ACATGAAGCA GAATAATGCA      240
AAATCTCGAG                                         250

```

(2) INFORMATION FOR SEQ ID NO:1283:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 257 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1283:

```

GAATTCGGCC TTCATGGCCT AGCTGAAGAA GGCCTTCACA GAGCTTCAAG CCAAGTTAT      60
TGACACTCAA CAGAAGGTGA AGCTCGCAGA CACACAGATT GAACAGCTAA ACAGAACGAA      120
AAAGCATGCA CATCTTACAG ATACAGAGAT CATGACTTTG GTAGATGAGA CTAACATGTA      180
TGAAGGTGTA GGAAGAATGT TTATTCTTCA GTCCAAGGAA GCAATTCACA GTCAGCTGTT      240
AGAGAAGCAG TCTCGAG                                         257

```

(2) INFORMATION FOR SEQ ID NO:1284:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 434 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1284:

```

GAATTCGGCC TTCATGGCCT AAAGACTAGC ATATTTATCT TTGACTTGAT TAATCAGACC      60
TAATTTGCAT TCGCAAATGA GACTGATAAA AATGGATTTA CCTTTTAACC TTTAGAGGAG      120
GAAAGGTATT TCTCTGCAAG ATTTCTGGGG CTATCGTTTC TTAACCGATA AGAAGCCACT      180
CCTTTATCAA TAAAGATGAA AATCCGCAAT TTGCATTAGT GAATGGGACT GATTATTATA      240
TAGTTAATTA GCATCTGGAA ATGAGGATTA TCTTAATTAC AAAGCACAAT TTCCTAATA      300
GCTACAAAAC TGTAAGTTTG ATCCATGTGG AAATTGGTAA CATTATTATG TAATTAGTGA      360
TAACATTAAT AGTGTAGAAT ATTTAGATGT AATTTGCATA TGCAAATGTG ATTTACCTGA      420
GCCAAAAACT CGAG                                         434

```

(2) INFORMATION FOR SEQ ID NO:1285:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 302 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1285:

```

AGCAATATTT ATTTTAGACA GACTTCTGCG TTATGACCCG GCTGCTGGGC TACGTGGACC      60
CCCTGGATCC CAGCTTTGTG GCTGCCGTCA TCACCATCAC CTTCAATCCG CTCTACTGGA      120

```

```

ATGTGGTTGC ACGATGGGAA CACAAGACCC GCAAGCTGAG CAGGGCCTTC GGATCCCCCT 180
ACCTGGCCTG CTACTCTCTA AGCATCACCA TCCTGCTCCT GAACTTCCTG CGCTCGCACT 240
GCTTCACGCA GGCCATGCTG AGCCAGCCCA GGATGGAGAG CCTGGACACC CCCGCACTCG 300
AG 302

```

(2) INFORMATION FOR SEQ ID NO:1286:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 245 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1286:

```

GAATTCGGCC TTCATGGCCT AATCTTTTCT AATTGTCTT AATGCTTTAT AATTTTCTAT 60
GCAGAGGTCT TGTAGATCTC TTTCCAAGAT ATTTGATGTT TGTTTGTTG TTTGTTTGTT 120
TGTTTTTTGA GACGGAGTCT CACTCTGTTG CCCAGGCTGG AGTGCAGTGG CGTGATCTTG 180
GCTCACTGCA ACCTCCGCCT CCTGGGTTCA AGCAATTCTC CTGCCTCAGC CTCCAAGTC 240
TCGAG 245

```

(2) INFORMATION FOR SEQ ID NO:1287:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 232 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1287:

```

GAATTCGGCC TTCATGGCCT AATTTTTTTT CTCCTCTTTC TTCTAGTACA TATTGATAGG 60
TATAACATAA TTAAGGTTTA AAAAAAATTA GACATAGTTA TTCAGATTTA GGACCAGTAA 120
GGATAGAACT TTCTCTTATT TATGAAAAAA AATGCTAATA ATTTTGGGGC AGTTTTTTCC 180
TTTAATTATT TTTTCAATT TCAAGTTTAA TTTTATTTTA GCTGATCTCG AG 232

```

(2) INFORMATION FOR SEQ ID NO:1288:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 298 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1288:

```

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGCCT TCATGGCCTA AGAAGATCAC 60
TTGAATCTGA GAGGTAGAGG CTGCAGTGAG CGAAGATCAC ACCACTGGAC TCCAGCCTGG 120
GCAACAGAGT GAGACCCTGT CTCAAAAACA AAGAAGAGCA CTAGCTTCTC TATCAAGTAA 180
GTGTAGGGTT TTA AAAAACA CAAATGGACT TTGGTAGACC AAAACAAAAG CCCACGAGTA 240
TGGAAGTTTC CCTTGAAGTT GGAAATTCAT TTTCCCTTTT ACCCCCCCAA CCCTCGAG 298

```

(2) INFORMATION FOR SEQ ID NO:1289:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 227 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1289:

```
GCGATTGAAT TCTAGACCTG CCTCGAGCCA TACCCATGGT CAGCCTCTTC CTCGTGTTCA    60
CGGCCTTCGT CATCAGCAAC ATCGGCCACA TCCGCCCGCA GAGGACCATT CTGGCTTTTG    120
TCTCTGGCAT CTTCTTCATA CTATCGGGCC TCTCCTTGGT GGTGGGCTTG GTTCTTTACA    180
TCTCCAGCAT CAACGACGAG GTCATGAACA GGCCCAAACA GCTCGAG                    227
```

(2) INFORMATION FOR SEQ ID NO:1290:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1290:

```
GAATTCGGCC TTCATGGCCT AGACAACTCT TAGCTAAATG TGGTTTGGTT TTGAGCTGGA    60
AGAGAGTACA AGGTGCTTCC GGAAAGCTTC AAGCCTTCGG ATTCTGTGAG TACAGGAGC    120
CAGAATCTAC CCTCCGTGCA CTCAGATTAT TACATGACCT GCAAATTGGA GAGAAAAAGC    180
TACTCGTTAA AGTTGATGCA AAGACAAAGG CACAGCTGGA TGAATGGAAA GCAAAGAAGA    240
AAGCTTCTAA TGGGAATACT CGAG                    264
```

(2) INFORMATION FOR SEQ ID NO:1291:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 323 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1291:

```
GAATTCGGCC TTCATGGCCT AGGTGCTCTC AAGGATCAGT ACTGGGTAAC AATAATCAAA    60
CTTTGAATTT AAACATGCAT CTATTATTG TGT TTTTGT TTTTGT TTTTGT GAGGCAAAGT    120
CTCACTCTGT CACCCAGGCT GGAGTGAAGC AGCCCAATCT TGGCTTACTG CAACCTCCAC    180
CCCCTGGGTT CAAGCAATTC TCCTGCCTCA GTCTACCTAG TGGCTGGGAT TACAGGCGCC    240
CGCCACCACG CCCAGGTAAT TTTTGTGTTT TAGTAGAGAT GGGGTTTCAC CATGTTGGCC    300
AGGCTGGTCT AGAATTCAAT CGG                    323
```

(2) INFORMATION FOR SEQ ID NO:1292:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 289 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1292:

GCTCGAGAAA	CTTCTGCTGC	ACGTGCGTCT	TCCCCTCCAC	CTTCACCCCT	TGTGGCTCAC	60
TCACGCACCC	ACTCTCCAGT	CCACCCCTCC	TCAGAGACCC	TGTCCACTCA	TCCATCTCTC	120
TCCCATTGCG	CTTCTCTTC	ACTCCGTTCC	TTCTGCCTCC	CACCATATGC	AAATCTTCTC	180
CATCCTTAAA	AGCCTGATTG	CCTCCTCTGG	ATTTTTCAC	ACTCTGGGG	AACTTCCTGT	240
GACTCCCTGC	CCTCACCAC	CAGCCTTTCC	CAAAGAGAAA	TCCCTCTCA		289

(2) INFORMATION FOR SEQ ID NO:1293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1293:

GAATTCGGCC	TTCATGGCCT	AGTTGAAATC	TTAGGAATG	AACTTCTGAG	GGCCAAAAAA	60
TGTGACTGAC	GGGAACAATT	CTTAAACTGA	TTAACTAGCT	GTAATATAGT	TTTGTGAATT	120
TATTGCACTG	ATGTGTACC	TTGTGGTATA	TCTGTCCCTA	TTAAATAAGT	GTTGTTTCT	180
CCTCTTTAAT	ATTGCTGTGA	ACAGTGGTGC	CCATTGTAGC	ATATGTTTGA	TTTTTTTTTA	240
TTATTTTATA	AGAAAACTAC	GTTAATTTTA	CCTTACTTTC	ATTGTAAATA	AGCCTGTCTT	300
CCTATCTGGA	TTTTTTGTGT	GCATACATAT	TCTACTGATT	AACTACTTTT	GCAGTTTTAA	360
TCCTGTATTA	TTTCTTCTAC	TTTGTTTTGT	GTAAGGGG	AAAAAATAAA	AAAAGCTCGA	420
G						421

(2) INFORMATION FOR SEQ ID NO:1294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1294:

GAATTCGGCC	TTCATGGCCT	ACAGGTGTAT	GTCAACATGC	CTGGCTAATT	TTGTTTTTCT	60
TTTCTTTTTT	TTTTTTTCCT	AGAGACAGGG	TCTCACTATG	TTGTCTGTCC	TGGCTGGTCT	120
CAAACCTCTG	GGCTCCATCT	TCCCGCTTCG	GCTTCCTGAA	GTGCTGGGAT	TACAATAGGC	180
ATGAGCCACT	ATGCCCATCC	TAAAGTTTTA	CAGCCCAATA	ATAGTAATAT	TCCATCACTA	240
CAGCTATCAT	TGAGTTTCAG	AAGTTAGACT	GTAAAAAGTT	TCAGTAAAGA	GCTTTAACCA	300
GTTTATTGTG	GCAATACTGT	GTACACAATT	ATTTTTTGTA	AAAGGAAGGA	GATTTCTGTC	360
TTAAATAGCT	TTAATAAAGT	TTCACTTTCA	TATACAGGAA	ACCTCGAG		408

(2) INFORMATION FOR SEQ ID NO:1295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1295:

```
GAATTCGGCC TTCATGGCCT ACAGGCACTC CAGTTATAAT TATGTGCCTT TCTTCCATT      60
CTACCACTTT CTCTGATACT TCTCACTTCT TTCTCTGGTA CTTCTCACTT CTTTCTCTGG      120
TATCATTTTC ATTCTTCATC ATTGTTTTAG TGCCTTTACT TCAATTCCTT CATTATTGTA      180
ATTTTCTTT TTATCATCTT GTGATTCACT TTTTATTAT TTTTGATAG TATTCTCCTT      240
TTCTTCCATT CCACTCGAG
```

(2) INFORMATION FOR SEQ ID NO:1296:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1296:

```
GAATTCGGCC TTCATGGCCT AGTGGAGAGT GCTATCATT ACACCTGAAC TCTGGGCCAG      60
CTTAAGTGTA TATTCTGTAA AAAATTGAA ATCCCCAAA TGTCACATGC TATGACAGTC      120
ACTTCTTTA GTACTTTGTA ATCATACAAA ATGGTGTATG GGCTAAATAT TGCAGCACCT      180
ATGTCGTCAT CCTCCATGTT GCTTATTGAT CATGGAATGT TAATTAGCA ATAATTTTCT      240
CTGTGTGTGC GCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:1297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1297:

```
GAATTCGGCC TTCATGCAAG TAGGGTATGT AGGCTTCAGT TGGTTCTACT TTCAGAGAGT      60
TAAGATGGAA TGAGGCAGCT CATGGCACTA CAGGTCAGTT GCCTTCTCTC CAAAATGTTT      120
ACTCATGCAT GTGGGCACTC ATTGTATTTG AATAACAGCA ACAGTGCCTC CCTCAGTTTG      180
GAACCTCTAG TCCACTTGCT CACTCATGGT CCCTGCCTTA ACCCCAGTCA AGTTCAAAGC      240
CATAGGCATC ATTTGTCCGA CTGACATATT AGGGCATCTA CCAGTCAAAG GGTGATTGTT      300
GTAGATGACC TTTGGCCCGT TCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:1298:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1298:


```

GAATTCGGCC TTCATGGCCT ACACTCTCAT GTTTGTTGCA GCATTATTCA CAATAGCCAA      60
GGTATGGAGT CAACCTGAAT GTCGAACACA TGAATGGATA AAGAAAATGT TCACACACAC      120
AATGAAATGT GATTAGCCT TTAAAAAGAA GGAAATCCTG CCATTTGGAA CAACATGGAT      180
GAACCTGGAG GGCATTGTGC TAAGTGAAAT AAACCAGACA CAGAAAGACA AACACTGCAT      240
GACCTCACTT ACTGTGGAAC CCCTCGAATT CTGGATCTCC CTCGAG                      285

```

(2) INFORMATION FOR SEQ ID NO:1299:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1299:

```

GAATTCGGCC TTCATGGCCT AATGAATTTA GTATTATTTC TATCATTTC ATTGCAAATT      60
GTCAGTATCC CCTGCTACGT TTCTACTAAT TTACCATCGC TTCTTCAAAA AATTGTGTTT      120
AGAGTGCTAC AATTTAGAC TTTGAAATGA ATCACTATAA CTTTAAAAA TTAGAGATTT      180
TAAAAACTGG AGATTGAATA TATATAAAAA ATACAAAATT TGACATTAA AACCTCATTT      240
AACTTTTAAA AAAGCCAGAC TCATATTAAG GCACACACCC TCGAG                      285

```

(2) INFORMATION FOR SEQ ID NO:1300:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1300:

```

GAATTCGGCC TTCATGGCCT AGGGCCAATG GCCAGGATCT CTGGGGACTA GAAGGGTGGA      60
TTCCTGAACC TGGGTAACAA CGAGACAAAC TTAGCAATC TGAGCAAGGG AAGGGTCATC      120
AAAGTCCCAA AATCTAGCCC ACTAGCTGCC TAGCCAGGTA AACCAAGGCT TAGGGAGTTT      180
AGACCCCTTC ACATAAGAA GCTTAATAAA AAGTGTGGG TGAAGAGATA AACACATGAA      240
GGGGTTGGCT AAAGTCAAAA GAAGATCCGA GGCAGGTCTA GAATTCAATC GG                292

```

(2) INFORMATION FOR SEQ ID NO:1301:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1301:

```

GAATTCGGCC TTCATGGCCT ACTCCTCATT TGCCACCACC AGGCCAGTTT GTCCCTTTCC      60
AAACACAGCA ATCAGGATCG CCTCTGCAAA GGATAGAAAA TGAAGTGAA CTCTTAGGAG      120
AACATCTTCC AGTAGGAGGT TTTACTTACC CTCCATCAGC CCACCCCCCA ACATTACCTC      180
CATCAGCTCC CTTGCAGTTC TTAACACATG ATCCTTTGCA TCAGGAGGTG TCCTTTGGAG      240
TACCTTATCC TCCATTTATG CCTCGGAGGC TTACAGGATA GTAGATACCG ATCCCAGCAG      300

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CCAATACCAC CTCCCCCTTA TCATCCCAGC TTACTGCCAT ATGTGTTATC AATGCTTCCA      360
GTGCCACCTG CAGTGGGCCC AACTTTCAGC TTTGAATTAG ATGTAGAAGA TGGAGAAGTA      420
GAAAATTACG AGGCCCTGTT AAACCTGGCA GAGCGACTGG GAGAGGCAAA GCCTCGTGGA      480
CTGACTAAAG CAGATATTGA ACAACTTCCT TCTTATCGGT TCAATCCTAA CAACCACCAA      540
TCCTCGAG                                         548

```

(2) INFORMATION FOR SEQ ID NO:1302:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1302:

```

GAATTCGGCC TTCATGGCCT AGTATCTATC TAGTGCCTGT TTGTGCGTTT TTTTCTTTCT      60
TCCGCTGCTT CCCCATTTTC CTTCTGTCCT TTTTCTCCTG CTCCTTGTTT TCCAGCAGC      120
ACATGGGGTT CCTCGGAGGA GCAGAGGTGG CCGCCGTGGG GGGGCGTTTG GGCTGCGGTG      180
CTGCGTCATT TTTCTTTGCT TTTCTCTTTA CTTTAGACAC TGGCCCAACT CCAGGCGTTT      240
CCTTTCATTC CCTCAGTGCT TCTCTCTGA CCTGCATGTT GAGTCTGTA TTGCTGGGGC      300
TTCCAACAAA AACCAGAGTC ACTGACAGAG GGAACAGCAG AGACCTTGTT GGTATTGAGC      360
TGTGATGGAT ATAGCGATCT CGAG                                         384

```

(2) INFORMATION FOR SEQ ID NO:1303:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1303:

```

GAATTCGGCC AAAGAGGCCT AGGGTACGTG AATCTATTTT TTCAGCTGGA AATTTTATGA      60
AATCTGGTGT GTATTTTATA CTTATAGCAT ATCTCGAGGC AGGTCTAAAT TCAATTCTAG      120
ACCTGCCTCA AGAGCTCGAG                                         140

```

(2) INFORMATION FOR SEQ ID NO:1304:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 620 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1304:

```

GAATTCGGCC AAAGAGGCCT AAATAAGTTT ACTTTTATTT TTGGTAACAC TTTACTGCAT      60
TGTCTGAATA TTGACAATCA GTATGCATTA TGAAGCTACC TGGCTAACAT TGTGTACTCA      120
CTGTGTGTGC CAGGCCCTGG GTTCAATGCT CTACATGCAC TTATATTCA TTTAATTCTC      180
TCTGCAACCT GAGATGGTAT AGCCACCTCA TTTTACAGAG TTGAACTGA GGCTCAGAGA      240
CTGAAAGTTA AGCCTGAGGT TGCAGTCAAT AAGAGGCAGA GCTGGAAC TG AACTTACCT      300

```

GTGTCTGACC	ACCAGTTCGT	GTTCTGACGG	CAGGCTAGTC	TGCATCACAG	AGTGTGGAGT	360
AGATGGTGCA	TGCCTGCTAG	GATGGGCTAG	GTATCACTGT	AGGTAAGAAA	CAGCCCCAAA	420
CTATGGAAAT	GTACACCACC	GAAGGCTCTT	TTCTTGCCCA	TGCTGCACAT	CCTCCATGGC	480
TCTCCTGTGC	CCTGTGCCCC	ACATGCCCTC	ATCCTGCCAC	GAGAATAAAG	GAGCAGCCTC	540
CATATGGGAG	CTGTCAGCTG	CTCTAAGAGA	TGAAGGAGAG	AGTGGCCCGT	CTCAATGGCT	600
CCCAACTCTT	CTGCCTCGAG					620

(2) INFORMATION FOR SEQ ID NO:1305:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 736 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1305:

GAATTCGGCC	AAAGAGGCCT	ACTTTTGGCT	CAATGTTTTC	CAAACCTTATT	TGACCCCAAA	60
ACCTTTTTC	TATACCCAAT	AATAAGCTAC	AGAACTAATA	TTCTGCAAAT	GTCTCTTGGA	120
ACACACTGCC	TTAAACAGAT	ATTTCTATAG	CTGTCAGTAT	AGTTATGTTG	CTCCCAAGCC	180
TAGTTATCTC	CAGTTGTTTT	AAGGGTGTTA	TGAAAAATTC	TTAAATATA	TATGAATTTG	240
TGTAACACAC	ACAGAGACAC	ACACACATAC	TACTTTAAGG	GGGTGAGGAT	CATTAATTCA	300
GATAATTTTT	AAGTTTCCTA	GTGATTCTCA	ATCTCTTTGA	ATTTACTTA	CATTACACA	360
CACACGCACA	CACATATGTA	TATACACATA	TCATTTTAAG	AAGCTGAGGA	TCACTAATTC	420
AGATAATGTA	TAAGTTTCCC	AGTGATTCTC	AACCTCTTTG	AATTTTACTT	ATAATTACAT	480
ACACACACAC	ACTGTACTTT	ATATAAATGT	TCTCATGTAA	TCATGGTAAC	AGCTCAAATT	540
CCCAAAGCAA	GGGAAGACTT	CTCATTGTCA	GTTAAACCTG	TTAAACATG	AAAATATTCA	600
TTGAGCCTAG	TTCTTGTTA	TAAATAACAA	GAAATAAGAC	ATTCAGGCAT	TTTCCCTTTA	660
TGAAGATGTT	CAGTCATCCT	TTCTTGAAC	TACAATTAGG	AAAAGTATAT	GTCTTTATTC	720
CATTGAAGTT	CTCGAG					736

(2) INFORMATION FOR SEQ ID NO:1306:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 511 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1306:

GAATTCGGCC	AAAGAGGCCT	ACAGCAATAT	GCATCTTGCA	CGTCTGGTCG	GCTCCTGCTC	60
CCTCCTTCTG	CTACTGGGGG	CCCTGTCTGG	ATGGGCGGCC	AGCGATGACC	CCATTGAGAA	120
GGTCATTGAA	GGGATCAACC	GAGGGCTGAG	CAATGCAGAG	AGAGAGGTGG	GCAAGGCCCT	180
GGATGGCATC	AACAGTGGAA	TCACGCATGC	CGGAAGGGAA	GTGGAGAAGG	TTTTCAACGG	240
ACTTAGCAAC	ATGGGGAGCC	ACACCGGCAA	GGAGTTGGAC	AAAGGCGTCC	AGGGGCTCAA	300
CCACGGCATG	GACAAGGTTG	CCCATGAGAT	CAACCATGGT	ATTGGACAAG	CAGGAAAGGA	360
AGCAGAGAAG	CTTGCCCATG	GGGTCAACAA	CGCTGCTGGA	CAGGTTGGGA	AGGAGGCAGA	420
CAAACATGATC	CATCATGGGG	TCCATCACGG	GGCCAACCAG	GCGGGAAGTG	AGGCAGGGAA	480
GTTTGGCCAG	GGAGTCGACA	ATGCACTCGA	G			511

(2) INFORMATION FOR SEQ ID NO:1307:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 219 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1307:

GAATTCGGCC	AAAGAGGCCT	AATTTTCCC	CACACCACAC	CACTGTCCTC	TGTGCCTGTG	60
GAAACCACTC	AAATGCCTCT	CCCCAAGCCT	TCTTTCAGTA	ACAACCATCT	CATCCGGTTG	120
ATTACTGTAG	CTTTCGGCCT	GTATAACCCC	TCCTTATGTC	ATGCCTGTAC	CAGATGTTCC	180
ACTGCATCTG	TATCCCACCA	GATTGCACAT	ACTCTCGAG			219

(2) INFORMATION FOR SEQ ID NO:1308:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 344 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1308:

GCACTGCGCC	TGGCCCTTGT	GGATACTTTC	TAGGTGATTT	GAGGAGGAAA	GGCACAGCCA	60
TGTCTCCTAA	AGTTAACAAG	CACTAAGCTT	TCCCAAGTAG	TGAAATGTCA	AGCCTCTGCT	120
TCTGTCACTT	ATTTGTTTAT	TCAGCAGAAA	GTCCTGAGA	GCCTTCTGTA	CACCAGGCAC	180
AGTGCTGGGC	AGTGAAAGAG	ACAGACATGT	CCCTGGATCC	AGGGAGGAGA	TGACCAAGTG	240
ATGGCTGTCA	GGCCCAGACC	TTGCTGTTTG	TCTGCAGCCT	CTTCCCTCAG	GCAACTTGTT	300
CTCTATCAGG	AGAAATGAAA	TAATTATTAT	CTGGAGCTCT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:1309:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 565 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1309:

GAATTCGGCC	TTCATGCCTA	AAAAGGGTCA	GAGGAAGGCA	GTATCCTTGG	GGTGTGCTG	60
AAGTTGAAAA	TGGTGAACAT	TGTGATTTTA	CAATCCTAAG	AAATATGTTG	ATAAGAACAC	120
ACATGCAGGA	CTTGAAAGAT	GTTACTAATA	ATGTCCACTA	TGAGAACTAC	AGAAGCAGAA	180
AACTTGCAGC	TGTGACTTAT	AATGGAGTTG	ATAACAACAA	GAATAAAGGG	CAGCTGACTA	240
AGAGCCCTCG	AGTTGCAGGG	AGCCCAGATC	ATGCCACTGC	TCTCCAGCCT	GGGTGACAGA	300
GCAAGACTCT	GTGCCCCCCC	CCCACCCCAA	AAAAAAGAA	AACAAAAATT	AAAATCTTTA	360
GTTACTGTAT	TATTCAAAAA	TGTCTACTTT	CAAGAAAAAC	TACAGCCATG	CAAAGAAACA	420
GTAAATGTG	ACCATACTCA	GGAAAAAAG	CAGACAATAG	AAATGGCTTC	TCAGTAGGGC	480
TATATGTTGG	ATTTAGCAGG	CAAAGACTTC	AGAGGCCTTT	TAATAAGTAT	ATTCAAAGAA	540
TTACAGGAAA	ATATGAAAAC	TCGAG				565

(2) INFORMATION FOR SEQ ID NO:1310:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 104 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1310:

TGCACAGCTG TAGTACCCCA AGAAGAAAAT GTTACTTCTC TCATCTGGGC AAAACCCACA 60
GAAGACTTCC CAGCTTCTGC CACATAAAAG ACACAGAACT CGAG 104

(2) INFORMATION FOR SEQ ID NO:1311:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 105 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1311:

GAATTTTGGC TTCTGTTTAG CATGCTATCC TGTGTGAAAG AACTGAAAT CCAATATTAT 60
GGAGAGTATG TTAAAGCCAC CTCTGAAATG AAGACCACTC TCGAG 105

(2) INFORMATION FOR SEQ ID NO:1312:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 407 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1312:

GAATTCGGCC TTCATGGCCT AAAGGGAAGG GAGGTGTGAG GAGGATGGAG TAAGAGTGAG 60
AGGTCTAAG AACATGGAGG GAGGCTGTGT GTGATCGATG GAGAAATATG GTCCTGAGAG 120
ATTTCTTGTA GTCAAGAATG GCCAATACAT GTCTACCTTT AACTGGTATT GGAAGGAAGT 180
AGTTTCCTGC TCTGTGCTCT AAATACTCTC TATTACCTTC AAGATGTCAG CAAAATGTGA 240
TACATAGCAA TCTTGTGTTA GAGATGCTTT AGGAATTGCA GAAAAACCAT GCTATCAAGT 300
GGTAGGGAAG TGAGTGGCAA GAGGATGTCT GTCACAGAAA CTAGGGATAG AGGGGCTGGC 360
AATGGCAGAG ATGCAGGTGG AGTGGACTGA TTAAGGGGAG TCTCGAG 407

(2) INFORMATION FOR SEQ ID NO:1313:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 292 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1313:

GAATTCGGCC TTCATGGCCT AGGTCTTGCC ACATTGGCCA GGCTGGTCTC GAACTCCTGG 60

```

GTTCAAGTAG TCCTCCACCT CAGCCTCTCA AAGTACTGGG ATTACAAGCG TTGAGCCACC      120
CTCCCAGCCT TTGCCTTTT TTTTTTTTTT TTTTTTTTGA GGAGGAGAAT TAATTGATAC      180
ATAGACCCCT TAAGAGAAGG GATGCTATGG GCAGGAAGAG ATTGAAGGTA AAGGAAAAAG      240
GATTGAGCAC CCAAGCAAAA CAATTGGCCT GTGATAGAAG GGCGATCTCG AG              292

```

(2) INFORMATION FOR SEQ ID NO:1314:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1314:

```

GAATTCGGCC TTCATGGCCT AGATCCAAGA AGCTCAACAG ACCTCAAGTA GGATAAACAC      60
AAACAGATCT TACTAAGTC CTACTGCTGA AAGACAAAGA CGAGGAGAAC ATCTTGAAAG      120
CAGTGAGAGA AAAACAATC ATTATGGAGA GAGCAATGAT AAAATTCTTA TCAGAACAGT      180
GGAGGCCAGA AGGAAATAGA GTGACATATT CAAAATGCTG AAGGAAAAAT TTGCAACTAC      240
AAGTTCTAGA TCCAGCAAAA TTATCCTTCA AGAATGAAGG TTTAGTAAAG ACATTCCCAG      300
ACCCTCGAG                                     309

```

(2) INFORMATION FOR SEQ ID NO:1315:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1315:

```

GGCCCCAGCT CCTGAGTAGC TGGGATTACA GGCATGCACC ACCACACCCA GCTAATTTG      60
TATTTTTAGT AGAGACAGGG TTTCACCATG TTGGTCGGGC TGGTCTCAAA CTCTTGACCT      120
CAGTGATCCA CCCGCCTTAG CCTCCCAGAG TGTTAGAATT ACAGGCGTGA GCCACTGCAC      180
CCGGCTGGGA AACATTTTGA AAACGGCGCA GGGTTGTCCT TGAAAGTCCC AGGTTTCCTC      240
ATTGGCCCTG CCATTGGCGG GTGGGTGATT TCAGGCAGGA CACGCAGTGT CTGGGGACCC      300
TGGCTTTCTC ACTGGAAGAC GATTGTTATG GTCCAGAGG TGGTAACTCA GGTGTTTCATG      360
TCTGATTCTG GATGTTCTCT GCAGCTGCTG GAGTCTCCTG ATTGGAGAGC AGCAAATGAC      420
TGTTCAATGA CAGTTCTAGT TGTACCTCTA GCACCCCCAC TCGCTCGAG              469

```

(2) INFORMATION FOR SEQ ID NO:1316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1316:

```

GAATTCGGCC TTCATGGCCT AATCTATGTG TGTCAACTTT CATAGAACCC TACACCAAAA      60
AAGGTGAATT TTATTCGTG ATAAATTAAA AAGTAAAACA AAAGAGACAA AAATAGTAAC      120

```

CAGGGAAGCT	TTCAAAAAAT	ATATGTTCTT	GTTCAAGACC	AGCATGGCCA	ACATGGCGAA	180
ATCCCATCTC	TAATAAAAAAT	AGAAAAATTA	GCCAGGCGTG	GTGGTGGGCG	CATGTAGTCC	240
CAGCTATCCA	GCACCGCTCG	AG				262

(2) INFORMATION FOR SEQ ID NO:1317:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 497 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1317:

GAATTCGGCC	TTCATGGCCT	AAAGGAATGG	TATTTTGGCA	ACGCAGACAA	AGAAAGGAGT	60
GGCCCCGATG	GATTTCAAGA	GATGCAAGAA	TTGTGGACCA	AAGGAATGTT	AAATGCAAAA	120
ACCAGATGCT	GGGCTCAAGG	CATGGATGGA	TGGCGACCAC	TTCAGTCCAT	ACCCCAGCTC	180
CGAGTCATAT	AAGGTAACCC	AGACAACCAC	CTACGAATTT	AAAGCTCCTA	TAAATTGCCC	240
TTTCTGCATC	CGAAGTGTGA	TATTTGAAAG	TTAAAAACGT	TATCTTACAT	ACATAGATCT	300
TAAAAACGTAT	CTTACACCAC	AACCTACTCA	CAGATGCAAA	GGCAGTGGTC	GTGGTCTTCC	360
ATTGCTTGGG	GTCCTGGGGC	CGGGTTTGAG	GCTGAATGTC	AGGGTTTCCT	TTGCCATAAC	420
CTCATTCTGC	ACCACGTGCT	GTCAGCCAGG	CAGCCAATGT	GGACTTGGAG	GCTGGCATCT	480
GCTGGGCACT	GCTCGAG					497

(2) INFORMATION FOR SEQ ID NO:1318:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 451 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1318:

GAATTCGGCC	TTCATGGCCT	AATCTGGATG	TCTGTCCAAG	GCCTGACTGC	TGAACTCCTA	60
CTTTTCCTAC	AAAACCCTAC	CCACATGGCC	CTTCCTGCGG	GAAGAGATCT	TGAGCCTCCC	120
TGGCTATTAA	GACTCTGCTG	TGCAGCCTTC	TTTTACTGGA	CTCAGGGCTA	TCTTCCCAG	180
ACTAGGGCCT	TCTTGAGGAC	AATCGTGGTG	GCCCAGTGGT	TGACGCTGTC	TCCCCTGCAT	240
GTAGTTGGTC	TCCTGGTTG	CTTCTTGCCC	CTGTGGCTCC	CTTGGGAGAC	TGAAACTCAG	300
AGGACAGCTT	CTGGTCTGCT	GTTACATGGC	TCCCACAGGG	AGACTGGCCC	CACCTGTGCC	360
CCACCCATCA	CAGCTAGGGC	CTGGGATGGG	TCAGACACTG	GAAGAGCCTC	CCCCTAGGCC	420
ATGCATATGG	ATCGTGCCCA	CACGCTCGA	G			451

(2) INFORMATION FOR SEQ ID NO:1319:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 477 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1319:

```

GAATTCGGCC TTCATGGCCT ACACTACGGT ACTCCCAGCA TATCACCCCTT AATGTAACCTT      60
TAAATAACAT GGCCATTTTT TAAAAAGGAC ACAGGAACTA CATAACATTT TTTTTCAGAT      120
TTTGAAAAAT TCTAAATATG TCTAGAAAAA CTTTTCTTTC TGTTCCATTG TCCTTCCTAT      180
TCTCCATGAC CCCCTCCCGG CGGACTGTAT CAGGTACAGC CTGTTGGAAA TCCAGCACCG      240
CACATTAGGC ACACCACTGG TAAGTTTACT TGTTGAGTTA TCACCTTTTT TTTCTTTTAA      300
ATCAGAGAGG CAGCTCTGTG TTGAAGATGC TAGGTAGTGA TGGAAAAGAC ATTAGGAAAA      360
TTTGTTACCG TGGTAACCGG GGATGGACAT CATGACCTTT TGTGATATGC ATGCTGTGGC      420
CTTGGTAGTC TCTTCCCTA ATTAACATCC TGTGAGAAAC GTGAGAGATG ACTCGAG      477

```

(2) INFORMATION FOR SEQ ID NO:1320:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1320:

```

GAATTCGGCC TTCATGGCCT AGACGGAGGC TGGAGATTCA CATGGGGCGA GGAGTTGCAG      60
ACCAGCCTGG GCAAAGCATG GTGAGGCCCC GTCTCTGCAG AAATGAGAAA ATGAGCTGGA      120
TGTAAGTGGCA CCGACATGTG GTCCAGCTG CTGGGAGGGC TGAGGTGGGA GGATTGCTTG      180
AGCCTAGGAG TTCAAGGCTG CGGTGAGTAG ATCGTGCCAC TGCCTCCAT CCCTGGCAAC      240
AGAGCAAGAT CATTTCTCAA AAAGAAAAAA AAAGCCATCT CGAG      284

```

(2) INFORMATION FOR SEQ ID NO:1321:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1321:

```

GAATTCGGCC TTCATGGCCT AGGGAAATGT GTGATTGGGA AAGAGGCAGC TTTTAAAAAT      60
GTGTCTGGCC TTTGACCACG CAATTTCACT TTCCAGTATT TATTCTAGGA AAATACTCAT      120
ACTATTGCAA AGTTTATATA TAAAGATAGT TATAACTGCA TTGTTTATCA TTTACAAAAA      180
GAAACATCT GAAAGCCCAA CAAGACGGAA CTGGTTATTC CACATTGGCA CATTACATA      240
AGGCAATGCT CGAG      254

```

(2) INFORMATION FOR SEQ ID NO:1322:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1322:

```

GAATTCGGCC TTCATGGCCT AGGCACAGAA AAATTGGAAA GGATTGGTGG TCGTACATCT      60
TGCAGCTCAC TTAGTAGCTG CATGCATGTA GACCGGGTGG TGTGATGCA GTGTTGACTT      120

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GCTGGCATTG GGGTGGGTGG TAGCATGGTC AAGCTGGCTG AGTGATGGGA TATTGTCTCA      180
GAGGTTGGTG CAGGGAAACT CTGTGGGTGT GTCTAATGCA AGGATAATGA CAATGTCCTG      240
TCTGCCTGGT CTTTGGGGGG TCAGGTGGAG ATGTCCTTTT GGAAAGGCAG CCATTCTCTT      300
TGAGTGTCCA GAGGGCATGG TGCAGGCACA TGGATTGAGT GGAGGACTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:1323:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 440 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1323:

```

GAATTCGGCC TTCANGGCCT ACTGTGTGTA GAATTCTGTT TTCTCATGAT ATTGAAGACA      60
TTATTCCAGT ACTTTGACTG CTAGTATTGC TGTTGAAAAG TCTTAATTGC CCTTCCTTTG      120
TAAGTAATAA CCTTTTATT TGCTGTGTT AAGCCTTTT TTTTCCTTCC CATTAGTGT      180
TTTGCACTTT TGTATAATGT ATTGAGGCG TTATTTTTT CATTCCATCA TTTTATTTTT      240
TGTAATCCCA CTGGGATTC TTTGGGCTTC CTGGATCTGA GGATAATAAT AATGTCCTTG      300
AATAATTGTG GAAAATTCTT AACCATATC TCTTTGAATA ATGCCTCTTA TTTTCTCCTT      360
CTATAACTCT AATTAGACAT ATAGTCTATT TTTATGTGA CTTATGCCTT TTCATCCTTT      420
TTCGTCTCCA CATACTCGAG              440

```

(2) INFORMATION FOR SEQ ID NO:1324:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1324:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TAAATGCCC AGTTACCTGA      60
AATTGTATAA ATTCTTGCCA AAAGTGTTTG AACTTAATAC AAACCTCCCA TCTCTTACCT      120
CTTAGCACTG TGCTCATCTT GAGGGGACAT AGTCCCAATT TTGTATTTTA TATAATACTG      180
TTAATGAATA TGTGTAGACT TCATATGGTT GTGGGTAAGA GAATACTGCA TTCAGATAGA      240
AAAGATGCTA TATAGCTAAG TTGATCCGCG GATCCTCGAG              280

```

(2) INFORMATION FOR SEQ ID NO:1325:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1325:

```

GTTTCCTTTT CTAATTACAA AGAAAATAAA TAGAAATAGA TTTTACATGC TTTATTCTT      60
TGAGACAAGC CATTGTAAAT TGTTACTAGA CTAAGTAGTA GTATACCACT CATTGACTGG      120
TCTTTTCAAC TCCACTCAAA TTTGTAAAAA GCAATTCCTC TTATACTATC ATCTTTTGTG      180

```

TTTTTTAAGG TTTTGTGTG TGTGTTGTTT TTTGGCAAAA CATGATACAT TTCTCATGCT 240
 TGATCTAAAG AGGCTTTACA TAAGAGACAG AGTCGCTCGA G 281

(2) INFORMATION FOR SEQ ID NO:1326:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1326:

GAATTCGGCC TTCATGGCCT ACTATCTTGA ATGTCCAACCT CCAACTCCTA ATTATTTTAA 60
 AAATCTATGC ACTTCTTTCA CTGGAATTTT TATGCCCTCA TAGACTTTAC AGGCACATGT 120
 TCTATCACCA ATTAAGAGAA ATTTAACTTA CACATTTTAC AACTTATACA TGCAATTTGG 180
 CTGAGCTTAT ACAGCACAGA TCAACATTAC AATCAATTTA CTGCCATGTT AAAAAAAAAA 240
 TCAGTGAACA TTGTTCCGCT GACCTAATTT TTTGAAATAA GTTGGCCATC AGTGAATTG 300
 ATTGAGCTAT CTGTACAACC CCAACCTAC CTAAGCAAAG GGCTCGAG 348

(2) INFORMATION FOR SEQ ID NO:1327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 680 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1327:

GAATTCGGCC TTCATGGCCT ACACGGACTT ACATCCTCAT TACTATTCTG CCTAGCAAAC 60
 TCAAACCTAGC AACGCACTCA CAGTCGCATC ATAATCCTCT CTCAAGGACT TCAAACCTTA 120
 CTCCCACTAA TAGCTTTTTG ATGACTTCTA GCAAGCCTCG CTAACCTCGC CTTACCCCCC 180
 ACTATTAACC TACTGGGAGA ACTCTCTGTG CTAGTAACCA CGTTCTCCTG ATCAAGTATC 240
 ACTCTCCTAC TTACAGGACT CAACATACTA GTCACAGCCC TATACTCCCT CTACATATTT 300
 ACCACTAACC CTCGAGACCA CTTCATATAA ATACTTATTT ATTTCCCTATT TCCCCTGACT 360
 AGAAATATAA GCTCCATGGT AGCAGAGATT CTGATTGCTG CCTACTCTAT CCCCAGCTCC 420
 TATACTAGGC ACCATGAGTA CATGATCAGA AAATATTTCAT GGAAAAAAT ACATAAATGT 480
 ATAACAATCT TCATTTGTGA GTAAGAAGAT GGGCTCTGGA ATCAGACTGC CTGGATTGAA 540
 ATCCTAACTT CATCACTTAC TAGTCATGGG ATATTTTACC TCAGTTTCAC TTTTGTAAAA 600
 TGAAGATAAT AATGTCTACC TTATAGTATT GTGAGGATTA AGTGAATTAA TGCACACAAA 660
 ATTAGGCCAT GAAGGCCGAA 680

(2) INFORMATION FOR SEQ ID NO:1328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1328:

```

GAATTCGCGG CCGCGTCGAC TGCTACTGAG CTTCTTGGCT CTCTTATATA TATTCTTTAT      60
TGTCATTTAC TTTGGTGGAC GAAGAGAAGG AGAGAGTTGG AATTGGGCCT GGGTCCTCAG      120
CACTAGATTG GCAAGACATA TTGGATATTT GGAAGTCCTC CTAAATGA TGTTTGTGAA      180
TCCACCTGAG TTGCCAGAGC AGACTACTAA AGCTTTACCT GTGAGGTTTT TGTTTACAGA      240
TTACAATAGA CTGTCCAGTG TAGGTGGAGA AACTTCTCTG GCTGAAATGA TTGCAACCCT      300
CTCGGATGCT TGTGAAAGAG AGTTTGGCTT TTTGGCAACC AGGCTTTTTT GAGTATTCAA      360
GACTGAAGAT ACTCAGGGTA AAAAGAAATG GAAAAAACA TGTGTCTCC CATCTTTTGT      420
CATCTTCCTT TTTATCATTG GCTGCATTAT ATCTGGAATT ACTCTTCTGG CTATATTTAG      480
AGTTGACCCA AAGCTCGAG                                     499

```

(2) INFORMATION FOR SEQ ID NO:1329:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1329:

```

GAATTCGCGG CCGCGTCGAC CGCTGCCAAA TGCTTCACTC CTATCTACTC TCCCGATTCC      60
TTATACTTCT GAACCTCCTC AACAGAAATC TTGCTCTCTC CCTAAATCCT CAGTGAACAA      120
TACGTCCGCA AAAACTAAAT GATCCCTCCT CAGCCAGACA GAAAACTCTC AACATATCAA      180
CACTCCCAAG GCGTGGACAG                                     200

```

(2) INFORMATION FOR SEQ ID NO:1330:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1330:

```

GAATTCGGCC AAAGAGGCCT ACAGTCTTTT TAGGCATGTT TTTTTTTTTT TTGGTGTGTG      60
TGATGACAGG AATATGCATT TTATCTGTAG TGGTTTTAAA TCCTGTATTA AGCGTTGTTT      120
TCTTTTCAGA CTGCAAAATT CAAAATGGGG CTCTCGAG                                     158

```

(2) INFORMATION FOR SEQ ID NO:1331:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 552 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1331:

```

GAATTCGCGG CCGCGTCGAC GATCATGAAG CGCTCGGTAG CCGTCTGGCT CTTGGTCGGG      60
CTCAGCCTCG GTGTCCCCCA GTTCGGCAAA GGTGATATTT GTGATCCCAA TCCATGTGAA      120
AATGGAGGTA TCTGTTGGC AGGATTGGCT GATGGTTCTT TTTCTGTGA GTGTCCAGAT      180
GGCTTCACAG ACCCCAAC TGCTAGTGTT GTGGAGGTTG CATCAGATGA AGAAGAACCA      240

```

```

ACTTCAGCAG GTCCCTGCAC TCCTAATCCA TGCCATAATG GAGGAACCTG TGAAATAAGT 300
GAAGCATACC GAGGGGATAC ATTCATAGGC TATGTTTGTA AATGTCCCGG AGGATTTAAT 360
GGGATTCACT GTCAGCACAA CATAAATGAA TGCGAAGTTG AGCCTTGCAA AAATGGTGGA 420
ATATGTACAG ATCTTGTTCG TAACATATTCC TGTGAGTGCC CAGGCGAATT TATGGGAAGA 480
AATTGTCAAT ACAAATGCTC AGGCCCACTG GGAATTGAAG GTGGAATTAT ATCAAACCAG 540
CAAATCCTCG AG 552

```

(2) INFORMATION FOR SEQ ID NO:1332:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 760 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1332:

```

GAATTCGCGG CCGCGTCGAC CTCAGAACTA TTTAAATTTA GTTAAATTAC TATTATATTT 60
TATAGTAAAT ATTGGTCCAC TTTATAGCTC AGAACCTAAA AAGAGAATAT GTACCCAAAC 120
TTCTCTATGT TTACAACCAA CCCAGAGTTT AAGATTCTGA ATTGTGCTTT GTTTTGTTAA 180
AAATTTAACC AAGGGTCAGG CACAGAGGCT CATGCCTATA ATCCCAGCGC TTTGGGAGGC 240
CGAGGCGGGT GGATCACTTG AGTTCAGGAG TTCGGGACCA GCCTGGCCGG CATGGTGAAG 300
CCCCGTCTCT ACTAAAAATA CAAAAGTTAG CCGGGTGTGG TGGCATGTGC CTGTGGTCCC 360
AGCTGCTTGG GAGGCTGAGG CAGGATAATC NCTTGAACCC AGGAGGCAGA GGTTCANTT 420
GCAGTGAGCC GGGATTGTGC CATTGTACTC CAGCCTAGGC AACAGAGCG AACTCTGTTC 480
TTAAAAAATA AAAAGAAAAA AAAATTAACC AAGGTTCTCC TTTCTCTAAA TCTAGCAATT 540
TGTTCTATTT TTCAGAAATA AACTTAATAA TTTTAATACA GATTTTAGCT TTGGCTTTTT 600
TCTTACTTTT TAGTTTGCAA ATTATTTTAT GGTATTCCTA CAAAGTAGAT ACAAATTTGC 660
ATTCAGAAATG CACCTTTTGT TTTCTGGGT TTTTGTGTTT GTTTGTTTGT TTTTCAGAA 720
AACTCATGGA AAAGTACACT GTTCACCTCA GCATCTCGAG 760

```

(2) INFORMATION FOR SEQ ID NO:1333:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1333:

```

GAATTCGGCC AAAGAGGCCT ANAACTGGGT AAGGAGCAAA AAAAGTGACA GAGGCCAGGC 60
GCGGTGGCTC ATGCCTACAA TCCCAGCACT CTGGCCAAAT ATTTGATTTT AAATTCCTAT 120
TGTACTGAT TAAAAAATAA AAAAATCTGG ACCAGTTAAC CTGGAGATTT AGAGGCTATA 180
GACACAATTT AACATCCATA CAGGCCTGTG AACTTCATGC AGAGAACAAA CAAACAAACA 240
AAAACCTCTA TTCAGAGTCT CTCATTTCAG CTTAGCCAAC ACATTTGGAG ACTTAGGGGC 300
CAGTTCTAGA AGCTGCTTTT ACCTCTAGAC TCGGAGGGGC AGGCCCTGTC ACCGAAGGGA 360
GGAAAACCTC TCTTGGCTGT CAGCCCGGAT TGAAGCCACT TCGCTTCCCC TGGCCCCAGC 420
TTTCCTGCAC TCTTTTCACC GTGTCTGACA CAGGGCAAAC CACCAACCAC TCAAATGAGC 480
AAACAATTCC AGAAAAAGA ATCCGAGATA AAGAATAACC AACTAGGAGT CTTTCCATTG 540
TAGCCTAAAC CGTCGATTGA ATTCTAGACC TGCCTCGAG 579

```

(2) INFORMATION FOR SEQ ID NO:1334:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs

- (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1334:

```
GAATTCGCGG CCGCGTCGAC CAACAAGGGC AAAGGCCTTG AGACACAAAC CAACTGTGTG      60
GGTGTAAGG TAAGAAAGGC CAGTGAGGCC AGCATGATGA ACTGGGGGAG CATGGTGGCT      120
GATTGGTCA GGAAGGGAAC AGAAACCAGA CCACTTGGGA TCTTCTAGCC AGAGTAAAGA      180
GACTGAGTTT ATTCCTATTG TAATGGGGAG CTATTCAGAG AGGTTAATCA TGGAAAGTAT      240
GTGACCTGAG CTACACTCTT AAAAGATGCC TCTGGCTGCT GTGTGGAGAA TGAACCATGG      300
GGGCAAAAGC AGAAACAAGA AGACCACTTA AGAGGCTCTT GCAATAATTT ATGTGAGAAG      360
AGTGATCATC TTGACTAGGG TGGTGGTGGT AGAGGAGGTG AGTGGTGGTC AGGACTGAGA      420
GGAGCCAACA GAATTTGCTG GCTTGCTTGG ATGTGGGTGA TGAGGCAAAC TGAGAATCCA      480
AGATGGCACC AAGGCTTATA CCCTGAGCAA CTGAACTCGA G                          521
```

(2) INFORMATION FOR SEQ ID NO:1335:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 775 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1335:

```
GAAATTCGCG GCCGCTCGA CGCTCTTGAG TGAGACCCAA CAAGCTGCTT TTCACCAAAT      60
TGCAATGGAG CCTTTCGAAA TCAATGTTCC AAAGCCCAAG AGGAGAAATG GGGTGAACCT      120
CTCCCTAGCT GTGGTGGTCA TCTACCTGAT CCTGCTCACC GCTGGCGCTG GGCTGCTGGT      180
GGTCCAAGTT CTGAATCTGC AGGCGCGGCT CCGGGTCTCT GAGATGTATT TCCTCAATGA      240
CACTCTGGCG GCTGAGGACA GCCCGTCCTT CTCCTTGCTG CAGTCAGCAC ACCCTGGAGA      300
ACACCTGGCT CAGGGTGCAAT CGAGGCTGCA AGTCCTGCAG GCCCAACTCA CCTGGGTCCG      360
CGTCAGCCAT GAGCACTTGC TGCAGCGGGT AGACAACCTC ACTCAGAACC CAGGGATGTT      420
CAGAAATCAA GGTGAACAAG GCGCCCCAGG TCTTCAAGGT CACAAGGGGG CCATGGGCAT      480
GCCTGGTGCC CCTGGCCCCG CGGGACCACC TGCTGAGAAG GGAGCCAAGG GGGCTATGGG      540
ACGAGATGGA GCAACAGGCC CCTCGGGACC CCAAGGCCCA CCGGGAGTCA AGGGAGAGGC      600
GGGCCTCCAA GGACCCCAGG GTGCTCCAGG GAAGCAAGGA GCCACTGGCA CCCCAGGACC      660
CCAAGGAGAG AAGGGCAGCA AAGGCGATGG GGGTCTCATT GGCCCCAAAG GGGAAACTGG      720
AACTAAGGGA GAGAAAGGAG ACCTGGGTCT CCCAGGAAGC AAACAGAGAC TCGAG          775
```

(2) INFORMATION FOR SEQ ID NO:1336:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 155 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1336:

```
GTAGATTTAG ATGTACAGAT AGAGGTATGA TTTTAAAAAG AGGCACCTCA GTATGGGTAA      60
TGTTATCTTT CTTGTGTTTC AGTGACACA CATACACACA CACCATAGAT GCAAAGTGTG      120
TAGAAAATGT ATTGAAGGAT ACCCAGGTAC TCGAG                          155
```

(2) INFORMATION FOR SEQ ID NO:1337:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 138 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1337:

GAATTCGCGG CCGCGTCGAC ATTCATGCAA ATAAATATAT TACTAAAATG CTACCTGTTT	60
CTTTTCTCTC TTTTCTTCC AGTTTATGTT TATGAGATTG GGTCTTGCTA TGCTGCCCAT	120
GCTAGGCATG AACTCGAG	138

(2) INFORMATION FOR SEQ ID NO:1338:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 249 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1338:

GAATTCGCGG CCGCGTCGAC CTAAACCGTC AATTCTTCCC ATCTTAGGTT TCTCTCCTCG	60
GAAGCCTTCT CTTAGAATC GAACATTTTC TCTTCTGGCT TTGTTGGGAT GGTTCCTGGT	120
CTGTTTCTTT CTGCTCCCT CGTGGCTTTC ACTTCTGTTT TCTTCCCAG AATGACGGTC	180
CTCTCATTG ACCGTGTGCT TTCCGAAGCA CCTGCTGCCA CCTTGTCTCG GCGATCCCGG	240
TTACTCGAG	249

(2) INFORMATION FOR SEQ ID NO:1339:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 108 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1339:

GAATTCGCGG CCGCGTCGAC AAAACAACAC ATTTTAAAGA TTACGTGCTT CTTGGTACAG	60
GTTTGTGAAT GACAGTTTAT CGTCATGCTG TTAGTGTGCA TCCTCGAG	108

(2) INFORMATION FOR SEQ ID NO:1340:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 652 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1340:

GAATTCGGCC	AAAGAGGCCT	AATAGAAGGC	ATTCCATATT	TGTTCAATGA	ATTAACAAAT	60
GTTTTTCATA	TTAATTGTTT	TGATTTTAC	CTCCTTAGGC	CAGCCTTTAT	TATTGCCATA	120
TAAGCCTTCT	GGTAGTACCA	AGATGTATTA	TGTTCCACAA	TTAAGACAAA	TTCTCCATC	180
TCCGGATTCC	AAATCAGATA	CCACCGTTGA	AAGCTCCCAT	TCAGGATCCA	ATGATGCCAT	240
TGCTCCAGAC	TTCCCAGCTC	AGGTGCTAGG	CACAAGAGAT	GATGACCTCT	CAGCCACTGT	300
TAACATTAAA	CATAAAGAAG	GAATCTACAG	TAAGAGGGTA	GTGACTAAGG	CATCCTTGCC	360
AGTGGGAGAA	AAACCCTTGC	AGAATGAAAA	TGCAGATGCC	TCAGTTCAAG	TGCTAATCAC	420
TGGGGATGAG	AACCTCTCAG	ACAAAAACA	GCAAGAGATT	CACAGTACAA	GGGCAGTGAC	480
TGAGGCTGCC	CAGGCTAAAG	AAAAAGAATC	TTTGCAGAAA	GATACTGCAG	ATTCCAGTGC	540
TGCTGCTGCT	GCAGAGCACT	CAGCTCAAGT	AGGAGACCCA	GAAATGAAGA	ACTTGCCAGA	600
CACTAAAGCC	ATTACACAGA	AAGAGGAGAT	CCATAGGAAG	AACGACCTCG	AG	652

(2) INFORMATION FOR SEQ ID NO:1341:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1341:

GAATTCGGCC	AAAGAGGCCT	ACGTGCCATT	TCTCTTCCAC	TATGAGAGGA	CCGATTGTAT	60
TGCACATTTG	TCTGGCTTTC	TGTAGCCTTC	TGCTTTTCAG	CGTTGCCACA	CAATGTCTGG	120
CCTTCCCCAA	AATAGAAAGG	AGGAGGGAGA	TAGCACATGT	TCATGCGGAA	AAAGGGCAGT	180
CCGATAAGAT	GAACACCGAT	GACCTAGAAA	ATAGCTCTGT	TACCTCAAAG	CAGACTCCCC	240
AACTGGTGGT	CTCTGAAGAT	CCAATGATGA	TGTCAGCAGT	ACCATCGGCA	ACATCATTAA	300
ATAAAGCATT	CTCGATTAAAC	AAAGAAACCC	AGCCTGGACA	AGCTGGGCTC	ATGCAAACAG	360
AACGCCCTGG	TGTTTCCACA	CCTACTGAGT	CAGGTGTNCC	TCAGCTGAAG	AAGTATTTGG	420
TTCCAGCCAG	CCAGAGAGAA	TATCTCNTGA	AAGTGGANTT	GCCAAGGCCA	TGTTAACCAT	480
TGCTATCACT	GCGACTCCTT	CTCTGACTGT	TGATGAAAAG	GAGGAACTCC	TTACAAGCAC	540
TAACTTTCAG	CCCATTGTAG	AAGAGATCAC	AGAAACCACA	AAAGGTTTTC	TGAAGTATAT	600
GGATAATCAA	TCATTTGCAA	CTGAAAGTCA	GGAAGGAGTT	GGTTTGGGAC	ATTCACCTTC	660
ATCCTATGTG	AATACTAAGG	AAATGCTAAC	CACCAATCCA	AAGACTGAGA	AATTTGAAGC	720
AGACACAGAC	CACAGGACAA	CTTCTTTTCC	TGGTGCTGAG	TCCACAGCAG	GCAGTGAGCC	780
TGGAAGCCTC	ACCCCTGATA	AGGAGAAGCA	CCTCGAG			817

(2) INFORMATION FOR SEQ ID NO:1342:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1342:

GAATTCGGCC	AAAGAGGCCT	AGCACCATGG	ACAACCCACA	GGCTCTGCCA	CTCTTCTCTAC	60
TCCTGGGGAT	CCTCACCCCTC	AGAGCCTCTT	CTGGACTTCA	GCAAACCAAC	TTCTCCTCTG	120
CCTTCTCTTC	AGACTCAAAG	AGCTCTTCCC	AGGGGCTGGG	TGTGGAAGTT	CCCTCCATCA	180
AACCTCCAG	CTGGAAGATT	CCAGATCAGT	TCCTGGATTG	AAAAGCCTCT	GCTGGAATCT	240
CTGATTCCAG	CTGGTTTCTT	GAGGCCCTGA	GTTCCAACAT	GTCTGGGTCC	TTCTGGTCAA	300
ATGTTTCTGC	TGAGGGCCAA	GATTTGAGCC	CGGTTTCCCC	CTTCTCTGAA	ACCCCTGGTT	360

CTGAAGTATT TCCTGATATT TCGGATCCTC AAGTTCCTGC CAAAGACCCC AAGCCTTCCT 420
TCACTGTAA GACCCAGCT TCAAACATTT CTA CTCAAGT CTCCCATCTC CTCGAG 476

(2) INFORMATION FOR SEQ ID NO:1343:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 726 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1343:

GAATTCGCGG CCGCGTCGAC CAGGAAATGA AGACATTGCC TGCCATGCTT GGAAGTGGGA 60
AATTATTTTG GGTCTTCTTC TTAATCCCAT ATCTGGACAT CTGGAACATC CATGGGAAAG 120
AATCATGTGA TGTACAGCTT TATATAAAGA GACAATCTGA ACACTCCATC TTAGCAGGAG 180
ATCCCTTTGA ACTAGAATGC CCTGTGAAAT ACTGTGCTAA CAGGCCTCAT GTGACTTGTT 240
GCAAGCTCAA TGGAACAACA TGTGTAAAAC TTGAAGATAG ACAAACAAGT TGGAAGGAAG 300
AGAAGAACAT TTCATTTTTC ATTCTACATT TTGAACCACT GCTTCCTAAT GACAATGGGN 360
TCATACCGCT GTTCTGCAAA TTTTCAGTCT AATCTCAT TG AAAGCCACTC AACAACTCTT 420
TATGTGACAG GAAAGCAAAA TGAAGTCTCT GACACAGCAG GAAGGGAAAT TAACCTGGTT 480
GATGCTCACC TTAAGAGTGA GCAACAGAA GCAAGCACCA GGCAAAATTC CCAAGTACTG 540
CTATCAGAAA CTGGAATTTA TGATAATGAC CCTGACCTTT GTTTCAGGAT GCAGGAAGGG 600
TCTGAAGTTT ATTCTAATCC ATGCCTGGAA GAAAACAAAC CAGGCATTGT TTATGCTTCC 660
CTGAACCATT CTGTCAATGG ACTGAACTCA AGACTGGCAA GAAATGTAA AGAAGCACCA 720
CTCGAG 726

(2) INFORMATION FOR SEQ ID NO:1344:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1344:

GAATTCGGCC AAAGAGGCCT AGGGACAGCA ATCAAGTTCT AATGGTGCTC ACTTTT TAGG 60
TCACCTTCAT CACAGACTGC TCCAAAGGCA GAGCAATGTG GAACGAACCA GCACATTTAC 120
TTAAGATCAA AGTATGATAC ATCTCTTTGA GCGCCTCACT TCACAATAGG GATCCATTCA 180
TTGGCTTCCA GATGATGTTT ACAGTTCATG TAACACTGAT ACTGACTTTG TTCCTTATGT 240
TTAGACAGCT TCTCTGTCTA TACTTCTCAG AAACACCATC AACCAGAACA GAGCCACTTA 300
TTATCCACAA AAGTTGCATC AACCAGCTTA CCTTCTGGGA GGGATGGATG GTACCCAAAT 360
ACTCAAACCTG AATCCTATAG TGTGGAGCAA CCAAACAGAA AACAGTCCAA GGATTCAGGA 420
AATGGTAAAA ACATTTTAAA TCTAAATAGT AGTTATTTTC ATTTTGTCTT GCTCCACCT 480
CGAG 484

(2) INFORMATION FOR SEQ ID NO:1345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1345:

GAATTCGCGG	CCGCGTCGAC	ATGAGTTTAA	TTTTTTTTTT	TTTTTTTACA	CTTTACATAG	60
AAATAGGATT	ATGTGGGCTG	GGCACAGGGA	CTGACGCCTG	TAATCCCAGC	ACGTGGAGGC	120
TCGAG						125

(2) INFORMATION FOR SEQ ID NO:1346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 760 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1346:

GAATTCGGCC	AAAGAGGCCT	AGACCCAGCG	TACATACTGA	ATGATCTCTA	CATCTCAGAC	60
TACTGTGTGT	GGATTCAGAA	AGTCAAATCC	AAAAAGTTGG	CAGCTCTTGC	AGAAGCCTTA	120
AAGGAAGTCT	CCCTTACAAA	GGCCCAGCTG	GGGTAGAAC	TGGAAGAACT	AGAAGCAGCA	180
GCACTGCTTG	TCCAGGAGGA	AGAACTGCA	TTAAAAGCAG	CCCATTCACT	TTCTGGGCAG	240
CAGACACTTT	GCTCCAGCTC	TGAGGCAAGT	GATTCGGAGG	ACTCAGACAG	CAGCGTGTCA	300
TCTGGAAACG	AAGACTCAGG	CTCAGATTCA	GAACAAGATG	AACTCAAAGA	TAGTCCATCT	360
GAGACAGTCA	GTTCTTTGCA	AGGTCCCTTT	CTTGAAGAAA	GCAGTGCCTT	TCTTATTGTT	420
GATGGTGGAG	TACGCAGAAA	CACAGCCATC	CAGGAGTCTG	ATGCCAGTCA	GGGAAAGCCA	480
CTTGCCCTCT	CCTGGCCTCT	TGGAGTGTCT	GGGCCTCTGA	TAGAGGAGCT	TGGGGAACAA	540
CTGAAGACTA	CAGTTCAGGT	TTCTGAACCC	AAGGGCACCA	CTGCTGTAAA	CCGCAGCAAT	600
ATTGAGGAGA	GAGACGGCTG	TCAGACACCA	AATAATTGAC	TCTTAGGTGG	TTTATTTCAT	660
TGTTGAGAAA	TATGGTAGAT	TGGGTTTCAT	TTACCGAATG	AGAATTCTTC	ATTTTCACTT	720
TGTAATTTT	CTTAGTATAT	AGTCAGCCCA	CACCTCTCGAG			760

(2) INFORMATION FOR SEQ ID NO:1347:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1347:

GAATTCGCGG	CCGCGTCGAC	CATTTGAGAG	GTCCGTCTTG	TAAATGTTTG	GCACTTTGCT	60
ACTTTATTGC	TTCTTTCTGG	CGACAGTTCC	AGCACTCGCC	GAGACCGGCG	GAGAAAGGCA	120
GCTGAGCCCG	GAGAAGAGCG	AAATATGGGG	ACCCGGGCTA	AAAGCAGACG	TCGTCTTCC	180
CGCCCGCTAT	TTCTATATTC	AGGCAGTGGA	TACATCAGGG	AATAAATTCA	CATCTTCTCC	240
AGGCGAAAAG	GTCTTCCAGG	TGAAAGTCTC	AGCACCAGAG	GAGCAATTCA	CTAGAGTTGG	300
AGTCCAGGTT	TTAGACCGAA	AAGATGGGTC	CTTCATAGTA	AGATACCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:1348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1348:

```
GAATTCGCGG CCGCGTCGAC TCTAGGTTTT CTGATTTTGA TGGTAATATG GTATTCTGGG    60
AAATATCTGT CCAAATTATC CTGATCTCTG AACTCCTGCT GTTGAGGTCA GTCACCTCAC    120
ACAATACCAT GATGACAGCT TTATCAAGCC AGATGCTTAG TCAGAGCTTT CCAAGACCCA    180
GCTTTGGTTT TATCAGCAAA ATCCATCCTT CCCACCCCCC ATACACACGC CAGTTTGAGA    240
CTCCTCTCGA G                                     251
```

(2) INFORMATION FOR SEQ ID NO:1349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1349:

```
GAATTCGCGG CCGCGTCGAC CTAAACCGTC GATTGAATTC TGGACCTCCT GTGCAAGAAC    60
ATGAACCATC TGTGGTTCTT CCTTCTCCTG GTGGCAGCTC CCAGATGGGT CCTGTCCCAG    120
GTGCAGGTGC AGCAGTCGGG CCCTAGACAG GTGAAGCCTT CCGAGACCCT GTCCCTCAGT    180
TGTACTGTCT CTCTCGGCGC CATGAATGGT CATTACTGGA CCTGGATCCG GCAGACCCCG    240
GGAGGGAGAC TGGAGTGGAT TGGATCTGTC TATTATAATG GAAACAGAGT GTATCACCCC    300
TCCCTCGAG                                     309
```

(2) INFORMATION FOR SEQ ID NO:1350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1350:

```
GAATTCGCGG CCGCGTCGAC AATTACTACC ATTGTTAAGT GTCTCTTTAA CTAACTCAT    60
TGTTTAAAAG TTTTCTCCCT CTCTGTTTCT AAATCCAAAT TTCTGCTCTG GAATATATGT    120
TAGAAGAGAT ACATTGTGTG GAATGTTTGC ATTTCTTTTA TGAAATGCAG TATCTTTTGG    180
GGAATATTAT GTAAATGAAA TACCAATTAT TTTAAAAGAG CATTTTGTGT TGACATAGTG    240
CTTTCACAAA CTAAACTGG AATTTCTTTC TTTAGTCTAT CTATATCTTT TGAAAATGTT    300
GACACAGCTA AGAAGAAGCT GCCTGTTTAT ATCTTAGATG GTCTGACCCT CAGCTACAAG    360
GTATATGCTG ATATTCCTTG TATGAACCGT GTTTTCTGCT AACATTAAAA CATGCAAGTA    420
ATTGGTTACT TTCTAATTTT GTTTTGTGTT CATAGGTCCC ATGGCCCGTG GACATTGTTA    480
TAAGTTTGGA ATGTCAAAAA ATTTATAATC AAGTGTTTCT TCTCTTATTG CAAATAAAGT    540
GGGCATCCTC GAG                                     553
```

(2) INFORMATION FOR SEQ ID NO:1351:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1351:

GAATTCGCGG	CCGCGTCGAC	TTTATTTCAG	TGGATTCTCT	AGGATTTTCT	ATATAAAAGA	60
TGTCATCTGA	TAGAGTAGTT	TACTTCTTCG	TTTCCAACT	GAATGGCTTT	TATTTTCATCT	120
CTTTCCTAAC	TGTCCTGGCT	AGAACCTCCT	TTACCACGTT	GAATGGAAGT	GGCAAGAATG	180
AACATCCTTG	TCTTGTTTCT	GATTTCGAG				209

(2) INFORMATION FOR SEQ ID NO:1352:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 525 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1352:

GAATTCGCGG	CCGCGTCGAC	AATGGCTTTT	CTTCCTTCCT	GGGTTTGTGT	ACTAGTTGGT	60
TCCTTTTCTG	CTTCCTTAGC	AGGGACTTCC	AATCTCTCAG	AGACAGAGCC	CCCTCTGTGG	120
AAGGAGAGTC	CTGGTCAGCT	CAGTGACTAC	AGGGTGGAGA	ACAGCATGTA	CATTATTAAT	180
CCCTGGGTAT	ACCTTGAGAG	AATGGGGATG	TATAAAATCA	TATTGAATCA	GACAGCCAGG	240
TATTTTGCAA	AATTGTCACC	AGATAATGAA	CAGAATATTT	TATGGGGGTT	GCCTCTGCAG	300
TATGGCTGGC	AATATAGGAC	AGGCAGATTA	GCTGATCCAA	CCCGAAGGAC	AAACTGTGGC	360
TATGAATCTG	GAGATCATAT	GTGCATCTCT	GTGGACAGTT	GGTGGGCTGA	TTTGAATTAT	420
TTTCTGTCTT	CATTACCTTT	TCTTGCTGCG	GTTGATTCTG	GTGTAATGGG	GATATCATCA	480
GACCAAGTCA	GGCTTTTGCC	CCCACCAAG	AATGAGAGGC	TCGAG		525

(2) INFORMATION FOR SEQ ID NO:1353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1353:

GAATTCGGCC	TTCATGGCCT	AGGCTCCTAA	AATAAATAAT	CCACATAATT	GTAAATGAAA	60
CACATCAAGG	ATTTGAGTTA	ATAGCCTCTG	AGCAGCATT	ATATAGCCAT	TAGACTGGAG	120
TATTTGTTAT	CAAGAGGGCC	AGAGAACCCA	CCGCTAAAGC	CGTAGGGTGG	GAGGAACCTT	180
GGATTGCAGC	TACATGGCTT	ATGTAGGGAG	TTTGTAACAG	CCCCAAGCTG	AAACCAGCTT	240
CTACACCCAT	GACTGTTGAG	TGATTGAATT	CTAGACCTGC	CTCGAG		286

(2) INFORMATION FOR SEQ ID NO:1354:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1354:

GAATTCGCGG	CCGCGTCGAC	CAACAAGAGC	ACTGGCCAAG	TCAGCTTCTT	CTGAGAGAGT	60
CTCTAGAAGA	CATGATGCTA	CACTCAGCTT	TGGGTCTCTG	CCTCTTACTC	GTCACAGTTT	120
CTTCCAACCT	TGCCATTGCA	ATAAAAAAGG	AAAAGAGGCC	TCCTCAGACA	CTCTCAAGAG	180
GATGGGGAGA	TGACATCACT	TGGGTACAAA	CTTATGAAGA	AGGTCTCTTT	TATGCTCAAA	240
AAAGTAAGAA	GCCATTAATG	GTTATTTCATC	ACCTGGAGGA	TTGTCAATAC	TCTCAAGCAC	300
TAAAGAAAGT	ATTTGCCCAA	AATGAAGAAA	TACAAGAAAT	GGCTCAGAAT	AAGTTCATCA	360
TGCTAAACCT	TATGCATGAA	ACCACTGATA	AGAATTTATC	ACCTGATGGG	CAATATGTGC	420
CTAGAATCAT	GTTTGTAGAC	CCTTCTTTAA	CAGTTAGAGC	TGACATAGCT	GGAAGATACT	480
CTAACAGATT	GTACACATAT	GAGCCTCGGG	ATTTACCCCT	ATTGATAGAA	AACATGAAGA	540
AAGCATTAAG	ACTTATTCAG	TCAGAACTCG	AG			572

(2) INFORMATION FOR SEQ ID NO:1355:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1355:

GAATTCGCGG	CCGCGTCGAC	TGAAAAGTAG	GTTTTTGAAG	AGATATATTC	GAAATATATT	60
TTTTCACCTG	AAAAAAGTAA	AAATTTTTTT	CAAAAGCAAA	TAATTCAACT	CTAAAATTAT	120
ACTATTTCAA	CATTCTCATT	TATGTGAAAG	CATGTGATAA	ATTGTTGCTG	CGTCAGAGAT	180
ATGAGAAACT	CCTTTGCATT	AGGTGGGCAT	TATTCATAGA	CTTCTACATG	AAAGAGAAGA	240
GAAATAAAAG	ATGCACCAGG	ATTCTCGAG				269

(2) INFORMATION FOR SEQ ID NO:1356:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 713 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1356:

GAATTCGCGG	CCGCGTCGAA	CCCAGCAAAA	TGGGGATCTC	CACAGTCATC	CTTGAAATGT	60
GTCTTTTATG	GGGACAAGTT	CTATCTACAG	GTGGGTGGAT	CCCAAGGACT	ACAGACTACG	120
CTTCACTGAT	TCCCTCGGAG	GTGCCCTTGG	ATACAACGTG	AGCAGAAGGT	TCTCCATTTC	180
CCTCGGAGTT	GACCCTGGAG	TCAACTGTAG	CAGAAGGTTT	TCCGATTTC	TTGGAGTCAA	240
CCCTGGAGTC	AACTGTAGCA	GAAGGTTCTC	TGATTCCCTC	AGAGTCAACC	CTGGAGTCAA	300
CTGTAGCAGA	AGGATCTGAT	TCTGGTTTGG	CCCTGAGGCT	GGTGAATGGA	GATGGCAGGT	360
GTCAGGGCCG	AGTGGAGATC	CTATACCGAG	GCTCCTGGGG	CACCGTGTGT	GATGACAGCT	420
GGGACACCAA	TGATGCCAAC	GTGGTCTGTA	GGCAGCTGGG	TTGTGGCTGG	GCCATGTCAG	480
CTCCAGGAAA	TGCCTGGTTT	GGCCAGGGCT	CAGGACCCAT	TGCCCTGGAT	GATGTGCGCT	540
GCTCAGGACA	CGAATCCTAC	CTGTGGAGCT	GCCCCACAA	TGGCTGGCTC	TCCCATAACT	600
GTGGCCATGG	TGAAGATGCT	GGTGTTATCT	GCTCAGCTGC	CCAGCCTCAG	TCAACACTCA	660
GGCCAGAAAG	TTGGCCTGTC	AGGATATCAC	CACCTGTACC	CACTAGACTC	GAG	713

(2) INFORMATION FOR SEQ ID NO:1357:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 925 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1357:

```

GAATTCGGCC AAAGAGGCCT AGAATAATGC ATATACTGCC ATGTCAGATT CCTACTTACC      60
CAGTTACTAC AGTCCCTCCA TTGGCTTCTC CTATTCTTTG GGTGAAGCTG CTTGGTCTAC      120
GGGGGGTGAC ACAGCCATGC CCTACTTAAC TTCTTATGGA CAGCTGAGCA ACGGAGAGCC      180
CCACTTCCTA CCAGATGCAA TGTTTGGGCA ACCAGGAGCC CTAGGTAGCA CTCCATTTCCT      240
TGGTCAGCAT GGTTTTAATT TCTTCCCGA TGGGATTGAC TTCTCAGCAT GGGGAAATAA      300
CAGTTCTCAG GGACAGTCTA CTCAGAGCTC TGGATATAGT AGCAATTATG CTTATGCACC      360
TAGCTCCTTA GGTGGAGCCA TGATTGATGG ACAGTCAGCT TTTGCCAATG AGACCCCTCAA      420
TAAGGCTCCT GGCATGAATA CTATAGACCA AGGGATGGCA NCACTGAAGT TGGGTAGCAC      480
AGAAGTTGCA AGCAATGTTC CAAAAGTTGT AGGTTCTGCT GTTGGTAGCG GGTCCATTAC      540
TAGTAACATC GTGGCTTCCA ATAGTTTGCC TCCAGCCACC ATTGCTCCTC CAAAACCAGC      600
ATCTTGGGCT GATATTGCTA GCAAGCCTGC AAAACAGCAA CCTAACTGA AGACCAAGAA      660
TGGCATTGCA GGGTCAAGTC TTCCGCCACC CCGATAAAG CATAACATGG ATATTGGAAC      720
TTGGGATAAC AAGGGTCCCG TTGCAAAGC CCCCTCACAG GCTTTGGTTC AGAATATAGG      780
TCAGCCAACC CAGGGGTCTC CTCAGCCTGT AGGTCAGCAG GCTAACAATA GCCCACCAGT      840
GGCTCAGGCA TCAGTAGGGC AACAGACACA GCCATTGCCT CCACCTCCAC CACAGCCTGC      900
CCAGCTTTCA GTCCAGCAAC TCGAG                                         925

```

(2) INFORMATION FOR SEQ ID NO:1358:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 172 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1358:

```

GAATTCGCGG CCGCGTCGAC AAATAAACCC AGCAACTTCA TTCATTGACC TTATGTTTAT      60
TGAGGGCCTG CTAGTGCTGG GCACTGTTCT AGGCCCTGGG AATTTATTAG TGAGCAAAAC      120
AGCAAAATCT CTGTCCTCAT GGAGCTCACA ATATAGTAGG GAACGACTCG AG              172

```

(2) INFORMATION FOR SEQ ID NO:1359:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 770 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1359:

```

GAATTCGGCC AAAGAGGCCT AAGTCAGTGA GGTGGAGTCC GTTTTGAGG TCACGCGGCT      60
AGTAATGGA GCCTGGTTTA GAACCAAGTC AGTCTCATTG CAGAATCCAG AACCAGTGAT      120
TTGTAACGTA TGCATTGTC TCCAAAGGGA TCCAGCACTG GGTTTCTCA TTTTAAATGC      180
ATCCATTCTT TAAAGCCTCT GTTCACAGTC ACAAGGTGTA CTTTTTAAAG GAACACAGCA      240
CACAAATGTG ACCGCTAGTG GACAGCAGTG GCAGCCCAGT TGGATGGCAG AGCCTGGCAT      300

```

```

GCCGACTGGG ACAGAAGCCC CAGCACACGG TGTGATGATG GCGTCTCCAG GCTGACCTCC      360
ATGGCCTCAG GAATCAAAGT CCTCGGTCTC TTTCACGCGG GGTTTCAGAAA GAAAACCTCGG      420
CTATCTTACA TCTCCTCTCC CCTGTTTATT TGACTAAAGT GAAGTTCATG TGGCTTGAGC      480
CTCGTTTCCT GGGGAAATCA GCCTGGCTTA GGATTCCATT GTCTTCTGGG ACTGGGAAGA      540
TGTGGAAGGC TGACCTCACG CCCAGCTGAA GGTACCTTC CCAGACTCTG AGCTCGGCTG      600
CCTTCTGCAT CGCCACGGCT GGAGGGCCTG GCCCAGGCCG TGGCTGCATG CTGGCTTTCC      660
ACTGTCTCGG TGTCCCTGCT GCCTGTCAGT AATGTGCCCA GCACCTTCTG GTGTCATGTC      720
CCCTCTTGTT TGTGATTCTT TTCCTGAGCT AGTCCATTTT CTACCTCGAG      770

```

(2) INFORMATION FOR SEQ ID NO:1360:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 505 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1360:

```

GAATTCGGCC AAAGAGGCCT ACTCAGTGGG AACCTTTAAA CCCTAAAATC CAGGAAAAGA      60
AAATAAATAC ATTATCATGG ACCTGAGGGA TTTTACCTG TTGGCTGCTC TGATTGCCTG      120
TTTAAGGCTG GATTCCGCAA TAGCTCAAGA ACTTATTTAC ACTATTAGAG AGGAATTGCC      180
TGAAAATGTG CCCATAGGAA ACATACCAA GGATCTGAAC ATTTCTCACA TCAATGCTGC      240
CACAGGGACC AGCGCCAGCC TTGTCTACAG ACTGGTTTCT AAAGCTGGGG ATGCCCCCTT      300
GGTGAAAGTA TCCAGCAGCA CTGGGGAAAT TTTCAACACC TCCAACAGAA TAGACAGAGA      360
AAAACCTCTG GCTGGCGCCT CATATGCTGA GGAGAATGAG TGTTTCTTTG AACTTGAGGT      420
GGTGATCCTC CCCAATGATT TCTTCAGGCT GATCAAAATA AAAATAATTG TCAAGGATAC      480
CAATGATAAT GCCCCAATC TCGAG      505

```

(2) INFORMATION FOR SEQ ID NO:1361:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 553 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1361:

```

GAATTCGGCC AAAGAGGCCT AAATTTGTTT TCTCCAAACC AGAAGACCTT AGGTACAGAT      60
GACCCCAAGG AGCTGGGACA GCAGGACAGA NAGGGGAAGG GACAGGTCCA TATATAGGTG      120
TGTCATTGCA GCCACTGCAA TGAACATAAC ATGCAAGAAA TGTACAGAAT GTGGTCCAGA      180
ATTGCCCCTT GGTGTCTGTG GCCCTGGTGG ACCCCACAGA GGAAGTCCCC AGGCTTTCAC      240
TTTCTTCCC CATGGATTGA GCAAGCTCCC AGGGCAGGAT GGGTGGCCAG GAGGGGCAGA      300
ACGCTGGCGG GGACGGGGAA GCCAAGTGCT CACAGGACCA TCCACCACAG CTGCAGCCAC      360
ACTGCAAGAC GGCGGGGATG GGACACACGG TCTAGTTCTT AGTTCTGCCT CCTACAGGCA      420
GCCCCTGCTG TCACTCCAGA ACTAATTCTC TGTGTGCCAC TCACTCGCGT GTGTGACACA      480
CAACAGATAC ACATACATAG ACACATACGT ACATCTCCTC CCCCAATCTC ACCCTCTCAC      540
CACGCCCTC GAG      553

```

(2) INFORMATION FOR SEQ ID NO:1362:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 855 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1362:

```

GAATTCGGCC AAAGAAGCCT AGTCAACTTG ATCCAAACCT GTTGGTGAAG CAGCAGACTC      60
CACCATCTCA GCAGCAGCCA CTCCATCAGC CAGCCATGAA GTCTTTCCTT GACAATGTCA      120
TGCCCCACAC TACACCTGAG CTGCAAAAAG GGCCATCACC AATAAATGCT TTCAGCAACT      180
TCCCTATAGG CTTGAACTCA AACTTGAATG TAAATATGGA TATGAACAGT ATTAAAGAGC      240
CACAGTCCAG ACTAAGGAAG TGGACGACAG TGGACAGCAT TTCTGTGAAC ACATCTTTGG      300
ATCAAAACTC CAGCAACAT GGTGCTATTT CAAGTGGTTT CAGGCTGGAA GAGTCTCCAT      360
TTGTNCCCTA TGACTTTATG AACAGCAGTA CTTACCAGC CAGTCCTCCA GGTCAATAG      420
GAGATGGCTG GCCACGTGCC AAATCGCCTA ACGGCTCTAG CAGTGTTAAT TGGCCACCAG      480
AATTTCTGCC CTGGTGAGCC ATGGAAGGT TATCCAAACA TTGACCCTGA AACTGACCCT      540
TACGTCACTC CTGGCAGTGT CATAACAAT CTTTCAATTA ATACTGTGCG GGAAGTTGAC      600
CACCTCAGGG ACAGGAACAG TGGGTCATCC TCATCCTTGA ACACCACGCT GCCTTCAACT      660
AGTGCCTGGT CATCCATTCG TGCCTCCAAC TACAACGTTT CCCTCAGCAG TACAGACAAA      720
AGCACTTCAG CCAGAAATAG TGATTCCAAA TTGACATGGT CTCCTGGTTC AGTTACAAAC      780
ACCTCTCTGG CTCATGAGCT GTGAAGGTC CCTTTGCCAC CTA AAAACAT CACTGCTCCG      840
TCCCGCCACC TCGAG                                     855

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(2) INFORMATION FOR SEQ ID NO:1363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 646 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1363:

```

GAATTCGGCC AAAGAGGCCT AAAAAAGTA CATAGTAAGA CTAAGATACC AAGTTGTATA      60
CTAATATTTT TCAGGCCTTG GGCCTCAAAAT ATATATATTT ATATATAATA CTCCAGTGTG      120
AACAGCAATT CGATGAAATG TAAAATGTAT CTTTTTTTTT TTAAATCACA CACAAGTATT      180
CATAACCACA GGGTTCACCA GAAATCTAAA GCAAGGAGAC ACTCACTCAT ATAGAAATGG      240
AGTTACTCTT CCACAGATCG TTCTGATCAA AGGTTTTTGA ACAGAAATGA ATTAATGATT      300
TTTTTGTATA ATATCCAACA TGTCCTAT CAAATACATT TAGTATGAAA AAACAGATGA      360
AGAAAAGGAA CATACTTAG GACAAAGTAT CTGGTTAAAA TGCTGTTTCA TTAAATAAAG      420
CCCACTCTCC TTACTTTAGA GTCCTTGGT GAAATGGAGG TGAGTTTGAT GGAGTGCAGT      480
TGATGACCAC TGAAAAACAC GAGCCCTTTC AACAATGTTG CAACACTGTT AGTTTTTGGT      540
TTAAACACAC ACACACACTC ACAAATGCTA AGTGTACACT ACCAAATTCT GCGGTCAGCT      600
TTTCCAAGAA CTACTGGGGA AAGTTTCAAT GCTGCAATC CTCGAG                                     646

```

(2) INFORMATION FOR SEQ ID NO:1364:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1364:

```

GAATTCGGCC TTCATGGCCT AATGGCTTAG CTGAAGGAAA TGCTCCAGAA ATTGGACTGT      60

```

GTAACCATC AGTACAATAA TACGCTGTGT ATGTATGTGT ATATAAAATG AGAATTATGG	120
CATAATTGGA GCATTGTCAT TAATCAACAA ACTCACATTG AGACAAAAC TAGTTTTACA	180
GCTGTCTTGA TTAAAGCCAA GTGTTCCATG TTGCTGTGAA GAATAGCCTC TTTCAAATAC	240
TTTGGAAAGT AGTTACTTGG AAACCTGTAA AGGTATTACA TTTTATATT TAAACACCTA	300
TAGAGATCTT CAATTCCTTG AGTCTGAGCT TGTGGGTGGA ATTCTAAATT TGTATCATAA	360
TCTGTCTTTT GTGAAACATT TTGAAAATAT GTATATATAA TATTGTATAT GCAAATTGTG	420
TTGTTTCACT TGTAAGGGA AAAGGCTTAT TTTTCTTTAT ATTTCTGATA ACTTGTTTTG	480
CATATGACCG GCACTTCTCG AG	502

(2) INFORMATION FOR SEQ ID NO:1365:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 197 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1365:

GAATTCGGCC TTCATGGCCT ACAGAAGTAC GGAAGGCCGA AGAAAAGAAT AGAGAAGATA	60
GGGAAATTAG AAGATAAAAA CATACTTTTA GAAGAAAAAA GATAAATTTA AACCTGAAAA	120
GTAGGAAGCA GAAGAAAAAA GACAAGCTAG GAAACAAAAA GCTAAGGGCA TCGATTGAAT	180
TCTAGACCTG CCTCGAG	197

(2) INFORMATION FOR SEQ ID NO:1366:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 314 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1366:

GAATTCGGCC TTCATGGCCT AGGCCTGGGG TGGGACATTT TGTTTGTGAG AAGCCTGGAC	60
AAGAGGACGA GGTGCACACC ATGTCAGTCA CGGATTGTG AACTCACAGG AGAGGGTTGG	120
ATAGGGCGTG TGAACGTGAG CCGCGGTGT AGACGATGTG AAGCTGTGGT AACGGGTGGG	180
CTTGTGATGG CACCCGCTGC TCGCAGGAGA GGGTTGGATA GGGCATGTGA ACGTGAGCCT	240
GCAATGTAGA CGATGCGAAG TCGTGGTAAC GGGTGGGCTT GTGACGGCAC CCGTGCTTG	300
CAGCCTAACT CGAG	314

(2) INFORMATION FOR SEQ ID NO:1367:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1367:

GAATTCGGCC TTCATGGCCT ACTGGTCCCA TTTTCTATT GCAGTGGTCA TCATTTTAT	60
TGATGTATAA TAATATTGTA TCATAATCT TCATAATATG TGCTTCCAAA GTTTTTCTA	120


```

ATTTTTCAC T AACCTTTGAT TTGGTATTTA ATTTTtagTt GTCAGAAgTT TTTAAATATTT 180
GTATCATCAA AGCTATCAGG TTATTAAAT TGACTTCTCA TTTAGACATA CTTAGGCCAT 240
GAAGGTCGAG 250

```

(2) INFORMATION FOR SEQ ID NO:1368:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 261 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1368:

```

GAATTCGGCC TTCATGGCCT AGTGAGAGCA CCACACAAAG GACAGGAAAA ACACCAGCAA 60
TACATCAGCT TTACACAGCA GGCAAGTTTC CTGCTCTCTA CAAGTACAGA TGGAACTTGT 120
CTTGTGAATT AACATCCTGA CTACTTTTGT TGATCATCAC ATTTTTCCT CATGAGAGAA 180
ATAATAGTGT TTTATAGGCT CCTGAGAATA GGTTTACTAA AGTCATCGAG ATCTGGGTTC 240
AAATGACACT TCATGCTCGA G 261

```

(2) INFORMATION FOR SEQ ID NO:1369:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 408 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1369:

```

GAATTCGGCC TTCATGGCCT AGTTTTTGT TGTGTTTGT TTTGTTTTT GGCAAGAACA 60
GTTAGGAACC AGATCACAGT GAGGTATAGA GTGAATGAGA GTTGAGAATG TAAAGACAAT 120
GGATATAGAT CACTATTTCA GGAAGCTGTT TGTGAGAGGG AGGAGAAAAA TAAACAGTT 180
ACTGAGCAAT AGGGTGGTTG GTAAGGGGGA GGGATTTTT TCTGAAAGAT GGGAGAAAT 240
TTAACATACT TAAATTTGAT GGGATAAGCC ATGCACTTAT AGGCATTCAG TCAATATATA 300
TTTCACAAAT GAATGAAGAT AAATTAGGGA GAGGTTAATT GGAGATTTTA GGAGAGAGGG 360
AATAATTGAT CATGTAAAGT CATTGATAAG GTGGGAGCAG AACTCGAG 408

```

(2) INFORMATION FOR SEQ ID NO:1370:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 369 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1370:

```

GAATTCGGCC TTCATGGCCT ACTCGATTAC AGGTCTCCCG CCTGCCATGC AGAAAGTCAT 60
GTATAAGGGA CTCGTCCCGG AGGATAAAAC ATTGAGAGAA ATAAAGTGA CCAAGTGGGC 120
CAAGATCATG GTGGTTGGCT CCACCATCAA TGATGTTTGA GCAGTAAACA CACCCAAAGA 180
TGCTGCGCAG CAGGATGCAA AGGCCGAAGA GAACAAGAAG GAGCCTCTCT GCAGGCAGAA 240
ACAACACAGG AAAGTGTTGG ATAAAGGAAA ACCTGAAGAT GTGATGCCAT CTGTTAAGGG 300

```

GGCCCAGGAG CGCCTGCCAA CGGTACCGCT GTCCGGCATG TACAATAAAT CTGGAGGAAA 360
AGTCTCGAG 369

(2) INFORMATION FOR SEQ ID NO:1371:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 443 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1371:

GAATTCGGCC AAAGAGGCCT ATTTTTTTTT TTTTAACTG ATAGATGGTG CAGCATGTCT 60
 ACATGGTTGT TTGTTGCTAA ACTTTATATA ATGTGTGGTT TCAATTCAGC TTGAAAAATA 120
 ATCTCACTAC ATGTAGCAGT ACATTATATG TACATTATAT GTAATGTTAG TATTTCGTCT 180
 TTGAATCCTT GATATTGCAA TGGAAATTCCT ACTTTATTA ATGTATTGA TATGCTAGTT 240
 ATTGTGTGCG ATTTAAACTT TTTTGGCTT CTCCCTNTT TTGGTTGTGC GCTTTCTTTT 300
 ACAACAAGCC TCTAGAAACA GATAGTTTCT GAGAATTACT GAGCTATGTT TGTAATGCAG 360
 ATGTACTTAG GGAGTATGTA AAATAATCAT TTTAACAAA GAAATAGATA TTTAAATTT 420
 AATACTAACT ATGGGATCTC GAG 443

(2) INFORMATION FOR SEQ ID NO:1372:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 770 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1372:

GAATTCGGCC AAAGAGGCCT ACTTCCGGCT GGAGCTGCTG GGCGCGGGAC CTGGGGCGGT 60
 TAATTTGGAG TGGCCCTTGG AGTCAGTTTC CTACACCATC CGAGGCCCCA CCCAGCACGA 120
 GCTACAGCCT CCACCAGGAG GGCCTGGAAC CCTCAGCCTG CACTTCCTCA ACCCTCAGGA 180
 AGCTCAGCGG TGGGCAGTCC TAGTCCGAGG TGCCACCGTG GAAGGACAGA ATGGCAGCAA 240
 GAGCAACTCA CCACCAGCCT TGGGCCCAAG AGCATGCCCT GTCTCCCTGC CCAGTCCCCC 300
 GGAAGCCTCC AACTCAAGG GCCCTCCACC TGAGGCAGAT CTTCCTAGGA GCCCTGAAAA 360
 CTTGACGGAG AGAGAAGAGC TGGCAGGGAG CCTGGCCCGG GCTATTGCAG GTGGAGACGA 420
 GAAGGGGGCA GCCCAAGTGG CAGCCGTCCT GGCCAGCAT CGTGTGGCCC TGAGTGTTC 480
 GCTTCAGGAG GCCTGCTTCC CACCTGGCCC CATCAGGCTG CAGGTCACAC TTGAAGACGC 540
 TGCCTCTGCC GCATCCGCCG CGTCTCTGAC ACAGGTTGCC CTGCAGGTCC ACCCCACTG 600
 CACTGTTCGA GCTCTCCAGG AGCAGGTGTT CTCAGAGCTC GGTTCCTCCG CAGCCGTGCA 660
 ACGCTGGGTC ATCGGACGGT GCCTGTGTGT GCCTGAGCGC AGCCTTGCCCT CTTACGGGGT 720
 TCGGCAGGAT GGGGACCCTG CTTTCCTCTA CTTGCTGTCA GTCCTCGAG 770

(2) INFORMATION FOR SEQ ID NO:1373:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 597 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1373:

GAATTCGGCC	AAAGAGGCCT	AGTCTCTTTG	AAGATCTCTA	GGAACCTGCT	TTATGAATCT	60
TCATGCTCCT	GTGTGGATG	CATATACATT	TAGGATAGTT	AGGTGTTCTT	TTTGAATTGA	120
AACTTTACC	ATTATGTAAT	GCCCTTGTTT	GTCTTTTAAA	ATTTTGTGTT	GTTTAATATC	180
TGTTTTGTCT	AAAATTAGAA	TTTCAGCCTC	TGCTTTTTTT	CTGTTTCCA	TTTGCTTAAT	240
AAATTTTCT	TCATTCCCTT	ATTTTATGCC	TATGGGTGTC	ATTGGATGTG	AGATTTCATCT	300
CTTGAACACT	GTACTACTGG	TTCTTGCTTT	TTTACTCAGC	TGTCACCTCT	GTGCTTTTCA	360
ATTGGGCATT	CAAGGCTAGT	GTTGATATGT	GTGAATTGT	TTCTGTCATC	ATGTTATTAG	420
TTGTTTATTA	TGCTGACTTG	TTTGTGTGGT	TTCNTTATAG	TGTTACTGGT	CTGTGCACTT	480
AAGTGTGTTT	TTTAGTAGC	AATATTTTCT	TTTCATATGT	AGTGCTTTAT	GCGAGGTATT	540
TTGCAAGGAT	TTTCTGAATN	NTCNGAATTT	TTATGTGGGC	TAAACTAGGG	GCTCGAG	597

(2) INFORMATION FOR SEQ ID NO:1374:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1374:

GAATTCGGCC	AAAGAGGCCT	AGCCTCCCAG	TGTGAGCCAC	CGCACCAGC	CTGGATTGTT	60
GAATTCAATG	CTTGGGTCAC	CTCCAGATTC	ATTTTCACAG	TCTTTCATGT	TTTGGTCATA	120
TGACATTGTA	TTTTGCTGCC	ATATGACTGA	TCTTTTTTTG	TTAAATGTGA	GATACTTGTT	180
AAAAAATGTT	TAGCAATGAA	TTGAGGCCTA	GTAGCATGTT	ATCTTGCTGC	AGAAGAGATG	240
GGAGTCTACT	TCTGGGGGAT	GGTCAGGGGT	CCTCCATACA	GGCTGCAATT	GAGTCGTCG	300
GTGCAAGGCTC	AGTCCCTACA	AAGGCCAGGG	TATTTCCCTGT	CCACCTTAT	TCTGATGCAT	360
GACTCTTCTG	GGTCTCAACC	AGAGCCAGTG	GACTTCAGTA	TGGGTCGCTT	TCATTGGCAG	420
ACCTCAATC	CACTTGTTTT	CCATCTAATC	CACTCGAG			459

(2) INFORMATION FOR SEQ ID NO:1375:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1375:

GAATTCGGCC	AAAGAGGCCT	AATGGATCTC	ATGTGCAAGA	AAATGAAGCA	CCTGTGGTTC	60
TTCTCCTGTC	TGGTGGCGGC	TCCCAGATGG	GTCTGTCCC	AGCTGCAGCT	GCGGGAGTCG	120
GGCCCAGGAC	TGGTGAAGCC	TTCCGAGACC	CTGTCCCTCA	CCTGCTCTGT	CTCTGGTGGC	180
TCCATCAGCA	GCAATAGTTA	CTCCTGGGGC	TGGATCCGCC	AGCCCCCAGG	GAAGGGGCTG	240
GAATGCATTG	GGAGCATCTC	TTACAGTGGG	AGCACCTACC	TCACCCCGTC	CCTCAAGAGT	300
CGAGTCACCG	TTTCCGTAGA	CCCGTCCAAG	AACCAGTTAT	CCCTGAGGCT	GAGCTCTGTG	360
ACCGCCGCGAG	ACACGGCTGT	GTATTATTGT	GCGGGGGGGT	CTCCGGGCGA	TTATTCTTAT	420
GAGAATAGTG	ATTACCCCGA	CCCCCGTAC	TATTTAGACT	CCTGGGGCCG	GGGAACCCCTG	480
GTCACCGTCT	CCTCAGCTTC	CACCAAGGGC	CCATCCGTCT	TCCCCCTCGA	G	531

(2) INFORMATION FOR SEQ ID NO:1376:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 661 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1376:

```

GAATTCGGCC AAAGAGGCCT AATGACTCAG AAGAAAGAAG TTACTTTACC ATTTTGTGTT      60
ACACCATTTA AACTGCTTTC TGATTCCAAA CAGTTCAACA TTTAAGAAA AGCAAGATCT      120
TATATAAAAC ACAGAAAGTT TGATGAAGTG GTCTCCCTTT GCAAGGAGCT AATTCATCTT      180
GCATTGAAAG GATTGTCCTA TTATCACACA TATGACAGAT TCTTTTGGG CGTCAATGTT      240
GTTATGGGTT TTGTGGGATG GATATCTTAT GCCTCTTTGT TGATCATCAA GTCTCATTCC      300
AACCTTATAA AAGGTGTTAG TAAAGAAGTG AAGAAACCAA GCCATCTCCT GCCTTGTAAGT      360
TTTGTAGCTA TTGGCATTTC AGTAGCATT TTTCTGCTGA TTCAAGCCTG TCCCTGGACA      420
TATTATGTAT ATGGTTTGTG GCCACTGCCA ATATGGTATG CGGTTCTAAG AGAATTTCAA      480
GTTATTCAGG ACCTTGTTGT ATCAGTGTG ACCTATCCTC TGAGCCATT TGTGGGTAC      540
CTGTTAGCCT TTACCCTGGG AATTGAAGTA TTAGTTCTCA GTTTTCTA CCGCTATATG      600
CTTACCGCTG GACTTACTGC CTTTGCAGCT TGGCCATTTC TCACTCGGCT GTGGACTCGA      660
G

```

(2) INFORMATION FOR SEQ ID NO:1377:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 117 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1377:

```

GAATTCGCGG CCGCGTCGAC AAAAAAGGTA AAGATGTTGC TGTATGCAAA ATGGACCCAA      60
GTTATGTTTA TTCAAGTTGC CTGTAGAAAC TTAGTGCTCT ATAGCCACAA ACTCGAG      117

```

(2) INFORMATION FOR SEQ ID NO:1378:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 118 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1378:

```

GAATTCGCGG CCGCGTCGAC CTAAATTTA AACTGGCCT GGTTCCTT TTTTATCAAG      60
AGAGCTTAAC AGATAAAAAA TGAAATTAGT CTATTTTCTA CTTGCCAGCA GTCTCGAG      118

```

(2) INFORMATION FOR SEQ ID NO:1379:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 229 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1379:

GAATTCGCGG CCGCGTCGAC ATTTTATATA ATATTTTAAA TAAGTTTGTG TACAAAACAA	60
AGATTTGACT GCATTTTGAT TGTGACCCCG TTGCATGAAG TCAGGTGTGG AGTTTCCAC	120
TTGTGGTATC ATGTTGCTGC TGCTCAAGAA GTTCTGATT TTGGAACATT TTGGATTTG	180
GATTTTCACA TTGGGGATAC CTAATGTGAG AGAGACTAGG CCACTCGAG	229

(2) INFORMATION FOR SEQ ID NO:1380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1380:

GAATTCGCGG CCGCGTCGAC GTTGGGGACA TGGTGGGTCT GAGAAAAGTG TTGCCCACAA	60
CTTCTATCT GGCATTCCCT GCGGAGGAAA TAGAATGCGC GCTCTCCGAC AGCATTTCCCT	120
GTAACATCCG CGAACTCGAG	140

(2) INFORMATION FOR SEQ ID NO:1381:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 99 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1381:

GAATTCGCGG CCGCGTCGAC TCTCAGAAGA GTTTGTGTTA ACTTCTATAA ATACAACCAC	60
TTCATGCGTT GGCATCTCCT TGAGAAAAGG CTTCTCGAG	99

(2) INFORMATION FOR SEQ ID NO:1382:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1382:

GAATTCGGCC AAAGAGGCCT AGTTTAAGTG CTGTGGAGTA GTATATTTCA CTGACTGGTT	60
GGAAATGACA GAGATGGACT GGCCCCCAGA TTCCTGCTGT GTTAGAGAAT TCCAGGATG	120
TTCCAAACAG GCCCACCAGG AAGATCTCAG TGACCTTTAT CAAGAGGGTT GTGGGAAGAA	180
AATGTATTCC TTTTGTAGAG GAACCAACA ACTGCAGGTG CTGAGGTTTC TGGGAATCTC	240
CATTGGGGTG ACACAAATCC TGGCCATGAT TCTCACCATT ACTCTGCTCT GGGCTCTGTA	300
TTATGATAGA AGGGAGCCTG GGACAGACCA AATGATGTCC TTGAAGAATG ACAACTCTCA	360

GCACCTGTCA TGTCCCTCAG TAGAACTGTT GAAACCAAGC CTGTCAAGAA TCTTTGAACA 420
CACATCCATG GCAAACCTCG AG 442

(2) INFORMATION FOR SEQ ID NO:1383:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 501 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1383:

GAATTCGGCC AAAGAGGCCT ATTCAAGTGT TTTCATTGG TGATCAGGAC TGAACAGAGA 60
 GAACTCACCA TGGAGTTTGG GCTGAGCTGG CTTTTTCTTG TGGCTATTTT AAAAGGTGTC 120
 CAGTGTGAGG TGCAGCTGTT GGAGTCTGGG GGAGGTTTAA TACAGCCTGG GGGGTCCCTG 180
 AGGCTCTCTT GTGCAGCCTC CGGGTTCATC TTAGCAACT ATGCCGTGAG TTGGGTCCGC 240
 CAGGCTCCAG GGAAGGGGCT GGAGTGGGTC TCAAGTATAA GTGACATTGG TGACACCAGA 300
 TACTACGGAG ACTCCGTGAG GGGCCGATTC ACCATCTCCA GAGACAATTC CAAGAACATG 360
 TTGTATTTGG ACATGAACAG CCTGAGAGCC GAGGATACGG CCGTGTATTA TTGTGCGGCA 420
 AGGGATTGGT ATCATACTCG TGGCTATTAC TGGTACTACT TTGACTTCTG GGGCCAGGGA 480
 TCCTTAGTCA GCGATCTCGA G 501

(2) INFORMATION FOR SEQ ID NO:1384:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 634 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1384:

GAATTCGGCC AAAGAGGCCT ACTTCAATAT TCTGTTACGG GTTTTTTTAG TCTTTTTTTC 60
 TCTTTGCTTT CCTGTGTTGG AATTTTCTAT TTCTATATAC TCAAGTTCAG AGATTCTTTC 120
 CTTTTCATA TCCTGTCTAC TAGTGAGCCC ATCCAAGGCA TTGTTTCATT CTGTTACAGT 180
 GTTTTGATCT TTAGTATTTT TTTTTCATTC TTCATTACAC TTTCTCTCTG CTAACATTGC 240
 CCATAAGTGC TTATATGCTG TATACTTTAT CTGTTGATCA TATTTGTTTT AAATTCCTAA 300
 TCTGATAATT CAACATCTCT GACATGTCTG GTTCTGGTTC TGATACTGTG TGTCAACTG 360
 TGGTTTTTTT TCTTTTAGAG TGGCTTTTAA TTTTCTTTT GTTTTTTGTT TTTTTTTTGG 420
 ATAGTTGGAC ATGACGTACT AGATAAAAGC AACTACTGTA AATAGACCTT TAGGAATGTG 480
 GTGGTAAGAT GTGAGAGGAA GAAAAGCATT CTGTAGTCCT GTTAGGTTTC AGTCTTTTAA 540
 CCCATTTATG CTTAGTGTTT TATTACTGGA ACGCTAGGCA TGTGGAAGTT ATTTATATCC 600
 TACTGCTAAA GGTTATCACC AAGCTGTACT CGAG 634

(2) INFORMATION FOR SEQ ID NO:1385:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 700 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1385:

GAATTCGGCC	AAAGAGGCCT	ACTCAAGTTC	AAGGAAAATG	AAGACAAAAA	GTGATATGAT	60
GGAAGAAAAC	ATAGATACAA	GTGCCCAGC	AGTTGCTGAA	ACCAAGCAAG	AAGCAGTTGT	120
TGAAGAAGAC	TACAATGAAA	ATGCTAAAAA	TGGAGAAGCC	AAAATTACAG	AGGCACCAGC	180
TTCTGAAAAA	GAAATTGTGG	AAGTAAAAGA	AGAAAATATT	GAAGATGCCA	CAGAAAAGGG	240
AGGAGAAAAG	AAAGAAGCAG	TGGCAGCAGA	AGTAAAAAAT	GAAGAAGAAG	ATCAGAAAAGA	300
AGATGAAGAA	GATCAAAACG	AAGAGAAAGG	GGAAGCTGGA	AAAGAAGACA	AAGATGAAAA	360
AGGGGAAGAA	GATGGAAAAG	AGGATAAAAA	TGGAAATGAG	AAAGGAGAAG	ATGCAAAAAGA	420
GAAAGAAGAT	GGAAAAAAG	GTGAAGACGG	AAAAGGAAAT	GGAGAAGATG	GAAAAGAGAA	480
AGGAGAAGAT	GAAAAAGAGG	AAGAAGACAG	AAAAGAAACA	GGAGATGGAA	AAGAGAATGA	540
AGATGGAAAA	GAGAAGGGAG	ATAAAAAAGA	GGGGAAGAT	GTAAAAGTCA	AAGAAGATGA	600
AAAAGAGAGA	GAAGATGGAA	AAGAAGATGA	AGGTGGAAAT	GAGGAAGAAG	CTGGAAAAGA	660
GAAAGAAGAT	TTAAAAGAAG	AGGAAGAAGG	AAAGCTCGAG			700

(2) INFORMATION FOR SEQ ID NO:1386:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 127 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1386:

GAATTCGCGG	CCGCGTCGAC	CTTTAGTGTG	TCTTTTCATT	CTCTAAAAAG	TGTCCTTTGC	60
AGAGAAAAAA	AAAATTTTAA	TTTGATGAA	ATCCAACCTA	TCAATTTTTC	TTCTGTGGCC	120
CCTCGAG						127

(2) INFORMATION FOR SEQ ID NO:1387:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1387:

GAATTCGCGG	CCGCGTCGAC	CTCTGTTTCT	TCGTTTTGCT	GAATATTTAT	TAGCATTCCA	60
TCACTTTGTG	TTTAATTAAT	AGAAGTTGAG	TTCAAACAAT	GTTTTTAAAA	TTCACACAAA	120
TACTCGAG						128

(2) INFORMATION FOR SEQ ID NO:1388:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 816 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1388:

GAATTCGGCC	AAAGAGGCCT	AGTTTCTTTT	GCTCTACATC	TTCACCAGTA	TTTGGTGTTA	60
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TCAGTGTCT GAATTTTGTC CATTCTGATA GGTGTGTAGA GGTATCTTAT AATTTTAATT 120
TGTGTTTCTC TGATGCCATA TGATGTGTGG GACATCTTTT CATATGCTGA ATTGCCATCT 180
GTATATCTTT GGTGAGGTGT CTGTTAAGGT TGTGGGCAA TTTTAAATT GGGTTGTTTG 240
TTTTCTGTG GAATTTTAAG AGTTCCTTAC ACTGTCTCTG TCTGTCTTGT CTGTCTGTCT 300
GTCTGTCTGT NGAGACAGAG CCTCGCTCTG TCACCCAGGT TGCAGTACAG TGGCACAGTC 360
TTGGCTCCCT GCAACCTCTG CCACCTGGGT TCAAGTGATT CTCCTGCGTC AGCCTCCCGA 420
GTAGCTGGGT TTATACCCGT GCACCACCAC ACCTGGCTAA TTTTGTATT TTTAGTAGAC 480
ACGGGGTTTC ACTANGTTAG CCAGGCTGGT CTCGACCTCC TGACCTCAGG TGATCCACCC 540
ACCTGGCCT CCCAAAGTGC TGGGANGNGA GCCACCACAC CCAGCCTCCT TACACATTTT 600
AGTTAATAGT TCTTTATCAG ATGTGTCTTA TGTAATATT TCCTCCCTAT CTGTGGCTTG 660
TCTTTTCATA CTCTTGACAT TGTCTTTGC AAAAGACAAC AATTTTAAAG AAACAAGTAG 720
ACAATTTTAA TGAAGTCTGG CTTATCAGTT CTTTCTTCA TGGTTGGTAC CTTTGGTGCC 780
GTATCTAAAA GTCATCACCA AACCCAAGAA CTCGAG 816

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(2) INFORMATION FOR SEQ ID NO:1389:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1389:

```

GAATTCGCGG CCGCGTCGAC CTAAACCGTC GATTGAATTC TAGACGAACT ATATGTTTAA 60
GCAAAAACAA AAATAAAAT CCTCAAAAA AGTAATATCA GAGTTTTAAT TTCAACCAGC 120
TGGCACAACA ATGAAAGTGT CAGACTTTCT GAAAGTACTC GAG 163

```

(2) INFORMATION FOR SEQ ID NO:1390:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1390:

```

GAATTCGGCC TTCATGGCCT AAAACCTCA AAAATAAATT AGAATCCAGC ACTGCTACAA 60
TATATTATCT AAAATGTCTA ATTCTCAAAA ATATGAGTGA TGCAAAGAAA CAGGAAACAG 120
TGAAACACAG AGGAAAAAAC AGTGACTAGA AACTGACTTA AGAGTAAGCC CAGATGTATT 180
TGGGAGCCAG AGCCTTCAAA GTAGCTATTA AATATGTTTC AAAAAATTAA GGGAAAATAT 240
GACAATGACT CAAAATAAG GACTCTAAAT ATAGAAATGG GAGCTG 286

```

(2) INFORMATION FOR SEQ ID NO:1391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1391:


```

GAATTCGGCC TTCATGGCCT ACTTTTAAGG GCTTGAAGT TTCAAAACCA CAGTCTGCAT      60
GTGACAGGTG CTCACTGCTG TTGGGTTGGC CGCTGGTTCT AGGCCTCTGC TGGAGTGTGT      120
GATCTGCTTT CTGACGGCAG GCGGTTTACA TGGGTGTGCT TTAATCTTAC GTCTCCGTCC      180
TCTTTTTCCT CTGAGAGTGC TGGTCTCAAG GACAGTGGAG ATGAGAGAAT TGAATATCG      240
CATAATGTCT CATCTGTTT ATCTCTGCT ACAACATCA CAATCTCAA ATAACAATGG      300
CAGTACAAC GCCACCTATA TCATTACTGA AAACAGTGAA GATATTTTT GCCTAAGTCT      360
TCCCATTTCTG TGTAGTTATG CAGAGTCTCG AG                                     392

```

(2) INFORMATION FOR SEQ ID NO:1392:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1392:

```

GAATTCGGCC TTCATGGCCT AGTAATCTTT CCCCCAGTT TTTGGATGAA GAAACTAACA      60
CTGAAGGGGC GAGGTGGCCT CCCAGGCTCA GAGGTGATT CAGAATCCAG GCCTGGTGT      120
CCTTCCACAG TACCAAAGCG CCACACATTA GTTGTCTTGT AGATTTTCCA CACTTCAGGG      180
AGAATGCCAA AGTATCTTTG CCTTGACAC ACTACCTGTT CAACACTCAG TGACGAGGGT      240
GTCGTGTGTG CTCAGGCAAC TCCCGCCCTT CTTCTTTTG CTCGAG                      286

```

(2) INFORMATION FOR SEQ ID NO:1393:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1393:

```

GAATTCGGCC TTCATGGCCT ACTGAGTTCT CAAATCTAAC GTTTtagGAA TTTTtATTC      60
CTGCAGAGAG TTGGGGAGCT GTTTAAAGT TGGTTGGTTT AGCCAGTATA GCTAGATTCC      120
TCAAGGTCAA CACAACGCCA TACTGCTCTA GCTGGGGCTA GATTCTCAT GATAGTCTAA      180
ACTGTGTGAT GGCCAAGTCC CCACTTTGAA GATGTCCAAA TTCAGCCTCA GACATTCTC      240
CTCAAGAAAG GGGGGGCAAA AAAGCCTTTT GTGCCCTTT CCCAAATTAT TTGCTCATGT      300
CGCAAGACTG AGGTCTCGAG                                     320

```

(2) INFORMATION FOR SEQ ID NO:1394:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 450 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1394:

```

GAATTCGGCC TTCATGGCCT AACGCCATCT ACGACCTGAT CGAGCGCATC GAGGATTTGG      60
CGCTGCAGAA CCAGATCCGG GAGCACGTCA TCTCCATCGA GGACTCGTTT GTGAACAGCC      120

```

```

AGGAGTGGAC GCTGAGCCGC TCCGTACCGG AGCTTAAAGT GGGCATAGTG GGGAACTGCT 180
CTAGCGGGAA GTCAGCCCTG GTGCACCGCT ATCTGACGGG GACCTATGTC CAGGAGGAGT 240
CCCCTGAAGG GGGGCGGTTT AAGAAGGAGA TTGTGGTGGG TGGCCAGAGT TACCTGCTGC 300
TGATCCGAGA TGAAGGAGGC CCCCTGAGC TCCAGTTTGC TGCCTGGGTG GATGCAGTGG 360
TGTTTGTGTT CAGCCTGGAG GATGAAATCA GTTTCAGAC GGTGTACAAC TACTTCCTGC 420
GTCTCTGCAG CTTCCGCAAC ACCCCTCGAG 450

```

(2) INFORMATION FOR SEQ ID NO:1395:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1395:

```

GAATTCGGCC TTCATGGCCT ACCGTCATTC ATTGCAGGGA CCATCAAACC CCAGACAATC 60
CTATTTTGGT GGGAAATCTA GCAGATAGAG AAGCCAAACA AGTAGCCCTA CAACCTGTAC 120
AAGGCCAGTT TCTGTGCCTG TCCTCGTTCT CTCCTCTTTA CTCTCCAGAA GAAAAGGAGG 180
ACTACCAAGC CCAAACCTT CAAAAACAAG GACCATGGTA TGTCAGGAA GGGTGCTTCC 240
TTCTTCTCA CTCTCAAACA ATCTCTATCC TTCGAG 276

```

(2) INFORMATION FOR SEQ ID NO:1396:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1396:

```

GAATTCGGCC TTCATGGCCT AGGGGCGGG GGGCGGGGCG GGTCTCAGAA ATCAGGAGTA 60
ACTCTTGAA AACTAAATAG TTAAATCT CATCCAATT CCACCTAACT TACATGCCTG 120
GTTAACCGAC ACTCTGTATA TCCTGTATAA AACATTCTAA CTGATGCCCA CGACATACTA 180
TTGGCTGATG GTTTTGCTAG TATACAGTAT GGCCACTTAC TGCCATTCCC ATGCCCTCGA 240
G 241

```

(2) INFORMATION FOR SEQ ID NO:1397:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1397:

```

GAATTCGGCC TTCATGGCCT AGAAAATGAA GAAGAAGATC ATCAAGGACC AGAAACTGCT 60
TGTGATCGTG GGGGGCATGC TGCTGATCGA CCTGTGTATC CTGATCTGCT GGCAGGCTGT 120
GGACCCCTG CGAAGGACAG TGGAGAAGTA CAGCATGGAG CCGGACCCAG CAGGACGGGA 180
TATCTCCATC CGCCCTCTCC TGGAGCACTG TGAGAACACC CATATGACCA TCTGGCTTGG 240

```

CATCGTCTAT GCCTACAAGG GACTTCTCAT GTTGTTCCGGT TGTTCCTTAG CTTGGGAGAC 300
CCGCAACTCT CGAG 314

(2) INFORMATION FOR SEQ ID NO:1398:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 342 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1398:

GAATTCGGCC TTCATGGCCT AGTGCACACC AAGAACCAAG TTCAGCTTG GTTACTGTGT 60
TGAAGACACC TTTGCTATAT TTCAAGTCAT TCCTTCTTTT CTCAATTTT TTTAATTGAC 120
AAAAATTTTA TATATCGTGT ACAACATCAA TCCATCTTGG CATCTGTATT TGTCAGGGTT 180
GTCTTAGAGG GACAGAACTA ATAGGATATA TATAAGGGGG AGTTTATTAA GTATTAACTT 240
ATATAATCAC AGGGTCCAC AACAGGCTGT CTGCAAGTTG AAGAGCAAGG AGAGCCAGTC 300
AGAGTGCCGA AACTGAAGAA CCTGGAGTCC GATGTTCTCG AG 342

(2) INFORMATION FOR SEQ ID NO:1399:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 614 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1399:

GAATTCGGCC TTCATGGCCT AGGGCCATGT TGGTTAGAAT GGTGCCATAT TTTCTGGGAT 60
AGCACCATGC TGGCTGGGAT GGTGCCATGT TGGCTGGGAT GGCACCTGCC TCAGCCTCCC 120
AAATAGCTGG GATTACAGGC ATCTGCCACC ATGCCTGGCT AATCTTTTGC ATTTTCTAGTA 180
GAGAAGGGGT TTCGTCATGT TGTCAAGGCTG GTCTCTCACT CCTGAACCTCA GGTGATCCGC 240
CTGCCTCGGC CGCCCAAAGT GCTGGAATTA CAGGCATGAG CCGCCACGCC TGGCCTTTTA 300
CTTGAGTTTT AATAGGATCG CTCTTGCTGC TATTGAGGAT AGTACATATG GGGTAATGAT 360
GCAAGCAGAG ACCTACTGTA GTACTCTTCA GGAGAGAATG GTGGCTTGCA CAAGGATGGA 420
AGCAATGAAG GTGGTGAAAA GTGGTCAGTT TCTATATTTA TTAGGAAACA CCTAGGATGA 480
TATCTTAATA GACCAAAATG TGAAATGTAA GAAAAATAGA GATGTCAAGA TGACACAAAG 540
ATTTTGGCT TTGACAACTG AAAGAATAGT TACTATCAAC TGTGATTGGT AACAAATGCAC 600
ATGGATCTCT CGAG 614

(2) INFORMATION FOR SEQ ID NO:1400:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 244 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1400:

GAATTCGGCC TTCATGGCCT AGTTCTATTT AAAAAATAAA CAACTAGACA ATTAAGTAGT 60

```

TTATTAACCT ATCACAATTG AATTTTTTTT TAATTTTCAG TCTTAACACA TTTTAAAA 120
TGTATTAAAG TAATACATTG TAGTAGTAGG ATTATATACT CCTGGGCTGA GAATCCAAG 180
TACTGTGGTT CTAAGTGTGA GTGGAAACT CTGGAAGTTA AAATATAGAA TATGAAACCT 240
CGAG 244

```

(2) INFORMATION FOR SEQ ID NO:1401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1401:

```

GAATTCGGCC TTCATGGCCT AAAACAAACA AAAAATTATC TGAATGATCC TGTCTCTAAA 60
AAGAAGCCAC AGAAATGTTT AAAAATTCA TCGACTTAGC CTGAGTCATA ACGGTTAAGA 120
AAGCACTTAA ACAGAAGCAG AGGCTAATTC AGTGTCACAT GAGGAAGTAG CTGTCAGATG 180
TCACATAATT ACTTTCGTAA TAGCTCAGAT TAGAATGGCT ACCCCATTCT CTAGACAAAA 240
TCAAATTGTC CTATTGTGAC TCTTCTAAAA ATGAAGATGA AGAGCTATTT AATGACACAC 300
CTTGATTAA AACGGGAAAC TCGAG 325

```

(2) INFORMATION FOR SEQ ID NO:1402:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1402:

```

GAATTCGGCC TTCATGGCCT AAAAGAAAAG AGAAAGTGT ATTTCCTGT TAGTGACATG 60
TAGTCCCTTT GTTCTAGTAG GAAAAAAGGT GCCTAGAGGT AGTATATAGA GTAAATATTG 120
TTCCTTTAGC CTACTTCCTG CAGCTTCCAA TTTATCCAAG GAAATGTCTA CAACAATTTT 180
GTTCAAAAGT CTGTTCTAGT CAATAGCAGG AGAAGTCCAC GTTATTGGGC TGATTTTGCT 240
TACATCAGCA AGAGAAATGT CACGTGATAC TCAGGCGCG CTTTCTCTTC CATCACACCA 300
TCTTCAAGGA ATGTCAATAA ACCCACTTTG GCTAGGCAGG ATTGAATTCT AGACCTGCCT 360
CGAG 364

```

(2) INFORMATION FOR SEQ ID NO:1403:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1403:

```

GAATTCGGCC TTCATGGCCT AGTTAGGGAC TAACATTGT ATCAACAGTT GATAAATGTC 60
TAAGATTGTT TATTATACAG CAGGGTACAA TGGTAGTGCT AATGCCAACA GGGCACCATG 120
GAAGTTAGTC TAAAAATTAT CGCTAGGCTT TATACAAGCA ACAACATATG CTGCTGCTCT 180

```

TAGAATTTTG GGAAATGATC TGCTTCTAAT ACTAAGCAGT TCTTTAACAT TTTTAAATAT 240
TGAATTCTAG ACCTGCCTCG AG 262

(2) INFORMATION FOR SEQ ID NO:1404:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 396 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1404:

GAATTCGGCC TTCATGGCCT AGCAATTGTC TTCAGTTTCC TTATGTTTGC CTTTCTCATC 60
TGTCCTCTTT TCCATTTTAT TCCTACTCTG TCTCAGTCCA CTTACAGTTA TATTTCTTAT 120
CTGTGTATTT TATAATATTT GTGCTTTAAT ACTTTTAAAA TATCCTTTAT TTTACTGTTT 180
CTTCTCTTCC CTTGTCATAT TTTAAAGTGT TTTATTTCTC AGCCTTCTAT ATCTTTGCAT 240
TAATTCTGTT CCTCTACAAT AGAGTCCGTT CCAAGCTTTC TGTCTTCTG TGTCCCTCCA 300
CGGCTCTGGC TCTCTCTGCA TTATTTCTTA TTTATGGAAT ACAAATCTTT TACCCTTGTA 360
TTTTTCTCAC TCCTCTCCAC ACACCCCGA CTCGAG 396

(2) INFORMATION FOR SEQ ID NO:1405:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 444 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1405:

GAATTCGGCC TTCATGGCCT AGACCAAAAT GTCTGCCCAG ATAAAGGATA CATTGTGCAT 60
ACATACACTG GGGAGAGGCA GACAAAAAAT CAATGTAGTT TGAGTGTGTG TCGGTGCTTG 120
CATGCGTGCA TGCAGGCATG TGCATATATA ATGCTAAAAC ATGATAAGTA CTATTAATAA 180
AACAGGTTAG GGTGATTGAA ACTACTAGGG TATGAATAAG AGTGGGTTGC AATTTAAAGT 240
AGGGTCATTG TGGTTGGCCT TATTGAGGTG ACATTGGAGT CAAGACTTGG AAGAAGAAAG 300
GTTGTTGGCC ACACAGCTAT TGAGGGAAAA ATGTTCCAGA TAGAAGAAAC AGTCAGGCA 360
ATGCCTTGGG ATGGAATCAT GCATAGAGTA TTCACAGAAT AGCAAGGAAG CTCTAGTTCT 420
AAAGTAAAGT GACTGAGACT CGAG 444

(2) INFORMATION FOR SEQ ID NO:1406:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 363 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1406:

GAATTCGGCC TTCATGGCCT ACCTAGAAGG TAGTAATGAT AAGCATTTAA TTAGAAGTAG 60
GCCTGAAGTT TGCACTGCAA TGCAGTAAGT ATTTACCGAG TGATTCATAT GAGTAAGGAT 120
GTGATAGCTG CTATAAGAGC TGCAAAGTTT ATTAAGATAC ATCCCTGTCC TGGAAACACT 180

```

GCCAGCTTCG ATGAGAATAC AACAAATGTTA GATATATTCG TTTTGGAAGA TACCTTTCCC      240
CCAGTTATTT TCATTTCACA GCTTCTCCAG CTCCTTCAG CTCTGTTCT CCCTCTTGC      300
TTTTCTGTCT CAATTTTCCT GCCAGCCCT AAATTCACAG AGTAAATCCA CCAGAACCTC      360
GAG                                                                                   363

```

(2) INFORMATION FOR SEQ ID NO:1407:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 229 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1407:

```

GAATTCGGCC TTCATGGCCT AGGCTTCAGG GATAACCACG TTCAGGTGGG TTAGACACAC      60
CTCCTGTGGG AGGGTGATTG CAATTAGCTA TCATAAGGCA GGAGACACAA CAGCAACTTA      120
AATTATCCAC AAGCAGAATC ATGAGCTGTT TGCAAAGGGA GTTTCCATCG CAAGACAGTT      180
TCACTGTATT TAAGCGAGAT CCTGCCCTCG TACACGATCA CCGCTCGAG                    229

```

(2) INFORMATION FOR SEQ ID NO:1408:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 512 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1408:

```

GAATTCGGCC TTCATGGCCT AGGCTTCTAG AACAAAGATG TAGGCAGGCT CCCAAATGGA      60
GAGGTAAACA TGACCGCGTT GTTTGAAACT ACTTCATTAA TTGTAAATC AGAACCAGAA      120
AGCTCTGGCC CTCCCACTTC TCTTAGCTGA CCCTCCTCCC CACTTACGGA TAAACAGACT      180
TTAACTTCCC TAACCCAGAA ACACTTCCAC CAAAATGTA TGGTTATACC TTATCCTAAA      240
AAGGCACCAT GCAGGCATTT AAGACTGAAC CAGTGAAGTC TAAATATGTA GTAGTAGAAA      300
ATATCACTAA TCAAACTTC CAGCATCAGA TGGTACAAAA CCCCAAGAGG ACTGGTGACA      360
TGTACCCCGG GATGGCAACC CCAGCTTCTG GCAACCCAC AGCCCAGCGG GAGCTTCAGC      420
TCTGGTCAGG TGCACGGCTG CCAAAGTCTG CACACCTTGG GGACAAGGAA AGGAGACACT      480
TGCTTCATTG TGCTATTCAT GACCCAGTCG AG                                         512

```

(2) INFORMATION FOR SEQ ID NO:1409:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 262 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1409:

```

GAATTCGGCC TTCATGGCCT AATGGATTAT ATTTCTATAA CAGTTAGAGT ACTATTCCAT      60
TTATCTCTTT CATTTTGAGT AAAGTTTGGT AGTTTAGGGA GGAATTGATC AATTTCACTT      120
AAATTGAAAG ATTCAAGTAC ATAAAGTTGT TGTTATATTA CTTATTATTC TTTAATGTC      180

```

TGTGGGGTCT AGTGATGTCT CCTCTTTCAG TTCTGATATT GGTAATTTGT GTCTTCTCTC 240
TTTTTGTGCC AGCATGCTCG AG 262

(2) INFORMATION FOR SEQ ID NO:1410:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1410:

GAATTCGGCC TTCATGGCCT AGGGAGGTGG TTTCTCTATC ATTGCATGAG GTAAGAGTCT 60
GGCCCTGGAT GCTAAGGCTG CAGTTTCTA CAGAAAGGAG TCATCTCTGT GAGGCAGCAT 120
CAGCCTCCAA GACACAGTCT GCTGACCTGG TTTTGTATAA AGATGAAAAC AGCTGTTCTC 180
AACTGGCTGA GGCCGGCCAC AGAGAGAGCG GCGGGCTCAG CCTTCACAGG ATTGTCCTTC 240
CACTAAAGGG TAGGGGGTTT TAATCATCGC AGAAAGGAAG TGGGGGTGAA GGTCAAGAAA 300
AATAGAAGCA CGAATTCACC CCTCAGGCCT CAGCTAGAGG AAGCTAAGAG AAGAAATGAG 360
ATTGCATAAC TGTTAAGAAA AAGGCAAAGC TGGAGAGAAT GCAGAGGATT CTGGTTCCTG 420
GAGAGAACCT TCAGACTCGA G 441

(2) INFORMATION FOR SEQ ID NO:1411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 479 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1411:

GAATTCGGCC TTCATGGCCT AATTCATTGT CTGGTCCTTT ACAAAGACA TATGCTGGCT 60
CCTGCTCTCT GTGGATGATA GGTCTACAAA GATGTGATT CAACTCATATA TGTCTCCAAA 120
TTTATATATT AATTCATATA CTGTTTGTG TTACATTAAT CTAGCATTGT CTTTGGCTT 180
GCTACTGCAG TAAGTTACCT TCTAATTCAT CATTAGGTCA ACTTTATCAA CTCACCTAAG 240
TCCAAAAGTA AATGTAGGTT TCTCTGGGT TCTTTGCCT CTTAAGTTT GCCATCCCCA 300
AATAAGCACA ACAGAGACCT GCACCAAGAG ACCTTACTTT TAGACTGTAA GCACCAAAGT 360
GATTTCTGTA GAGAGAGTGA GCCAGGCTCA GTCTTATGAC TGGCAATACA AGTTGAGGGT 420
AGGAGCTTTG GACAGAACAC TAGCTATGTA TAGTGTTGTC TAGGTGAGTG CTTCTCGAG 479

(2) INFORMATION FOR SEQ ID NO:1412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1412:

GAATTCGGCC TTCATGGCCT AGCCGATTTA TAAATATGTA TATATAACCT TTCCCTTTT 60
GAGAGATCTC TTAGTAATAG TCAAAGCCAT ACCCTATTCC TTAGTGAGAA AGCCAGTTTG 120

```

AAACGAATGT AGCAATAGAT GTAAAAACAT TTAAGGCGT TTTAATGTGG CTTTTTAATG      180
AGCTGGCTTA TGCCTGTAGT CCCAGCACAT TGGGCAGCTG AGCTGGGAGG ATCGCTTGAG      240
CCCGGGAGTT CAAGACTAGC CAGGGCAACA TAGTGAGACC CCATCTCTAT TTAACAAAAA      300
ATGTTTTTAA AGATAAGGAA CAGACTTAAA GTGATGATTG ATTGCTCATA GAACGTTTAT      360
TTTGGGCTCC AGAAGTAGGA ATGATGTAGA ATTTATTGTT GTGTCATTGT CTCATTAAAT      420
GCTGTAGTTT CCTATGTCCT TGCCTACCTT CTTTCCTCAG AGCCTCGCAT CTGACCCCTA      480
GAGAGTAGCA GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1413:

```

GAATTCGGCC TTCATGGCCT ACAGGAACAA AAAATGCTAT GCTATTATCT CAAAAATGCA      60
TACTCCTTCC TACTTAAGAA TAATAAATTT ATATATTATG ATATGGTAAA ATTCACAAC      120
AATTGTATTT TTCCCTAGAA TGTTTAAAGC ATTATCTAAT ACCAGCTTCA GTGTCTATAT      180
TACTGTAACT TCATGAAAGA CTAATAACAA TACTGGCTAT CATTATTATA TATTAAGTAG      240
TACTTGCCAG ATGCCGTTAG AGGTGCTTTA AATGCATTCT CATTAGTCT TCGTGTGTAC      300
TACCGTTATC TTCACTTTTT AGATAAGGAG ACTAAAGTAT AACTAGAGCT AAGAAACATG      360
AGAAAGACGA CCTAGCTACT GCCTATTTTG TAATCCCAT GGACTAAGCT TGGAGAAGTA      420
AGAACTATTA CTACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1414:

```

GAATTCGGCC TTCATGGCCT AGCCACTTCA AGACGGCAAG TTATTTTAGC TCCTGTCTAA      60
ATAAGTTAGT GGGCTCCAGT CCTTAAACCA CTATTTCTT TATTAATTCC TCAAGTACAG      120
ACTTTTGTAT GTAACCAAGT TTTTAAACC TGTGTATAAT GACTCATTAA TGAGTTGTAA      180
AATAAATGTA GTGAGTTATG ACCAATATAA AAAAATAGAA AAGGCCAGGC ACAGTCGCTC      240
GAG

```

(2) INFORMATION FOR SEQ ID NO:1415:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1415:


```

GAATTCGGCC TTCATGGCCT AGTCTTCCAA GACAGGAATC AGCAACCTTT TTTGTTTTTT    60
CTGTATCAGT AATTCATTCT GTATATTTTA AAAAGTTTTA ACCTCTTCTT CCTAGCCCCTC    120
CAGTATTGTG TTATAAATTA AAACGTTTCC CAAAGTGTTT TCTGTGAAAC AATAGTTCTA    180
AAAGGTGCTC TAAGAAAAGC TAAGTACATG GCAAAATCCA AAGTATATGT TTTATTTCATT    240
ACATTTGATG AATTTTTTTT GTTTTTTCCT CTCGAG                                276

```

(2) INFORMATION FOR SEQ ID NO:1416:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 341 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1416:

```

GAATTCGGCC TTCATGGCCT AGAGAGCAGG TTTTAGCTTG CATCCAGCTG TTTCTTGAGT    60
GATGTGTACA GCTTACCCCC AAAGAGGCAA CTGAATTTCA GCTGCTCTAA TACCCACACC    120
CTCAACTTAG GTTTAGTCAT AATAAAAAAC AGAATGGATT TGTTAGTTCC ATTGATTGCC    180
ACAAACCTCA CCTTCTGTGT GGCAGAGATG TGCTTTAGTT CTTCATTGGA ATGTTACTTT    240
CAGATCTCAC AAACCTCAA CCTAGGGCAC CACCAATGAC AAAGAGAATG CTAAATAGAT    300
AAATCCTTTC CCAGGTCTTC AAGCTTTCCA CTCGCCCGA G                                341

```

(2) INFORMATION FOR SEQ ID NO:1417:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 455 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1417:

```

GAATTCGGCC AAAGAGGCCT AGCCATTATT ATTAAAAAGT AGGATTGCTA CCCGCCATTA    60
CTATTAAAAA GTAGGATTGC TACCCGCCAT TATTATTAAGTAGGATT GGTACCCGCC    120
ATTATTATTA AAAAGTAGGA TTGCTACCCA ACATTATTAT TAAAAAGTAG GATTGCTACC    180
CTCCATTATT ATTAAAAAGT AGGATTGCTA CCCTCCATTA TTATTAAAAA GTAGGATTGC    240
TACCTGCCAT TATTATTAAGTAGGATT GCTACCTGCC ATTATTATTA AAAAGTAGGA    300
TTGCTACCTG CCATTATTAT TAAAAAGTAG GATTGCTACC CGCCATTATT ATTAAAAAGT    360
AGCATTGCTA CCCGCCATTA TTATTAAAAA GTAGGACTGC TACCCGCCGT TATTGACACA    420
GCTACCTTAT GAAAGTAGTT TCACGCTGTC TCGAG                                455

```

(2) INFORMATION FOR SEQ ID NO:1418:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 573 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1418:

```

GAATACCTAG CTTCCATGAT TTATGATAGA TATCCTTTAT TGGACCAATT CGTGTCTGTA    60

```

ACCAGCCTCC	TGTTTCTACT	GCCATCCCCT	CCTCATGCAC	AGATGCCTCC	TCCCTTGGCT	120
CCTGCTCTGA	TCCCTGTACC	CAGCTTGTC	CCTGCAAGCA	TGTTCCCTC	CCTTGCCCAG	180
GCTCTGACAC	CCCACACATG	TGTGGATCCC	CTCCCCTGTC	CCAGCTCTGA	TACCCCTTGC	240
ATGTGTGGCT	GCCCTCACC	TGGGTGTCCT	CTTCCCTGTC	CCAGCTCTGA	CACCCACGCA	300
TGTGGGGCTG	CCCCGTGCCT	AGGTGTCCCC	TCCTCTGCTC	AGGCTCTGTC	CTCCTGCGGT	360
TGGCTTTCCC	ATTCTGGATG	CACCTCACAC	ACAGCCTTGT	CATCTTTGGA	TGAATTTGGC	420
CTCCCCATC	CACTGCTGGT	GCAGATGCTT	CCTTACGGGG	CCTTGTCTGA	TGGCTTTAGG	480
GCTGAATCAT	GCAGGAAGGA	AGGAGAAGGA	CAAGAAGAAA	AGGGAAGGCT	GGGAAGGGAA	540
GCGGGTGGTA	AAATTGGTTC	ACAAGCCCTC	GAG			573

(2) INFORMATION FOR SEQ ID NO:1419:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 188 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1419:

GAATTCGGCC	AAAGAGGCCT	ATTTTAAAAA	AAACTATTTA	ATTTTTTAAT	TTATTTTGG	60
TTGTTTTTTG	CACAATGAAG	TTTCAGCTTC	TCAACCTTCT	CCCCTACCCA	GGGCTGTGGA	120
CCCAGACTGG	CCTTGAGCCA	CAGTCCCTCT	TTCCCTCCTC	ACCCTCTTCC	CCCTCCGGGC	180
ACCTCGAG						188

(2) INFORMATION FOR SEQ ID NO:1420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1420:

GAATTCGGCC	AAAGAGGCCT	ACGAGGAAAG	ATCTAATTAT	CATGGACCTG	CGACAGTTTC	60
TTATGTGCCT	GTCCCTGTGC	ACAGCCTTTG	CCTTGAGCAA	ACCCACAGAA	AAGAAGGACC	120
GTGTACATCA	TGAGCCTCAG	CTCAGTGACA	AGGTTCAACA	TGATGCTCAG	AGTTTTGATT	180
ATGACCATGA	TGCCTTCTTG	GGTGCTGAAG	AAGCAAAGAC	CTTTGATCAG	CTGACACCAG	240
AAGAGAGCAA	GGAAAGGCTT	GGAAAGATTG	TAAGTAAAT	AGATGGCGAC	AAGGACGGGT	300
TTGTCACTGT	GGATGAGCTC	AAAGACTGGA	TTAAATTGTC	ACAAAAGCGC	TGGATTTACG	360
AGGATGTAGA	GCGACAGTGG	AAGGGGCATG	ACCTCAATGA	GGACGGCCTC	GTTTCCTGGG	420
AGGAGTATAA	AAATGCCACC	TACGGCTACG	TTTtagatga	TCCAGATCCT	GATGATGGAT	480
TTAACTATAA	ACAGATGATG	GTTAGAGATG	AGCGGAGGTT	TAAAATGGCA	GACAAGGATG	540
GAGACCTCAT	TGCCACCAAG	GAGGGTCTCG	AG			572

(2) INFORMATION FOR SEQ ID NO:1421:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 498 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1421:

GCAAGACGGC	TACTGAGGCA	GGAGAATCGC	TTGAACCCAG	GAAGCGGAGG	TTGCAATGTG	60
CCAAGATCGT	GCCACTGCAC	ACTCTAGCCT	GGGCAACAGA	GCAAGACTGT	GTCTCAAAAA	120
AAAAAAATCT	TNGACNAAAC	ATAGTTGTTN	ACATACTTCT	TTAATCCCAG	AGTTAGTTTT	180
AAAAANNACA	TGATTGCTGT	TTTTGCATAT	TATCTCAGCG	GTCTAAAATT	AACCTAGCCA	240
TGTGCAGGAA	TGGGTAAAGT	CCCCTTAAAC	AAAAATGGGG	TTAGTTANGT	TAGTTCTTTT	300
GCCATTTTAC	TGGTCATATA	CCTGAAGCGC	TTAGCCTGAC	ACAATGTAAC	GCCAGACGGA	360
AGCCGNGATC	AGCGGTCTCTG	ACGGGGGTCA	GAGTCAGACC	AGGGGTCTTT	TACCCAAGTG	420
GGGAAGATTG	GGAAAGGCCT	AGGATCAGAG	AGGGAAATGG	GTCCCTGGTT	GCCCATGGAC	480
CTAATGGGGT	CTCTCGAG					498

(2) INFORMATION FOR SEQ ID NO:1422:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 827 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1422:

GAATTCGCGG	CCGCGTCGAC	GAGGAAACCA	GCCAAGGACT	AACTACGACC	ATGAGATTGG	60
CAGTGATTTG	CTTTTGCCCTG	TTTGGCATTG	CCTCCTCCCT	CCCGGTGAAA	GTGACTGATT	120
CTGGCAGCTC	AGAGGAGAAG	CTTTACAGCC	TGCACCCAGA	TCCTATAGCC	ACATGGCTGG	180
TGCCTGACCC	ATCTCAGAAG	CAGAACTCTC	TTGCGCCACA	GAATGCTGTG	TCCTCTGAAG	240
AAAAGGATGA	CTTTAAGCAA	GAAACTCTTC	CAAGCAATTC	CAATGAAAGC	CATGACCACA	300
TGGACGACGA	TGATGACGAT	GATGATGACG	ATGGAGACCA	TGCAGAGAGC	GAGGATTCTG	360
TGGACTCGGA	TGAATCTGAC	GAATCTCACC	ATTCCGATGA	GTCTGATGAG	ACCGTCACTG	420
CTAGTACACA	AGCAGACACT	TTCACCTCAA	TCGTCCCTAC	AGTCGATGTC	CCCAACGGCC	480
GAGGTGATAG	CTTGGCTTAT	GGACTGAGGT	CAAAGTCTAG	GAGTTTCCAG	GTTTCTGATG	540
AACAGTATCC	TGATGCCACA	GATGAGGACC	TCACCTCTCA	CATGAAGAGC	GGTGAGTCTA	600
AGGAGTCCCT	CGATGTCATC	CCTGTTGCC	AGCTTCTGAG	CATGCCCTCT	GATCAGGACA	660
ACAACGGAAA	GGGCAGCCAT	GAGTCAAGTC	AGCTGGATGA	ACCAAGTCTG	GAAACACACA	720
GACTTGAGCA	TTCCAAAGAG	AGCCAGGAGA	GTGCCGATCA	GTCCGATGTG	ATCGATAGTC	780
AAGCAAGTTC	CAAAGCCAGC	CTGGAACATC	AGAGCCACGG	CCTCGAG		827

(2) INFORMATION FOR SEQ ID NO:1423:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1423:

GAATTCGCGG	CCGCGTCGAC	GGGAGAGGAA	GGGTTGGGCA	GGATGGAATA	TTAAATTGTA	60
ACATGATAAA	CATGCAAGAC	TGTTATCCAA	TCTAGATAAT	TTATATACAT	TTTGATGACT	120
TAGGAAAAACA	AAGCAATCAT	TTGTGACAAG	CCTAAAAAGC	TTGACATATT	TAACATACTT	180
AGGAACTTTT	TTTGTGCGGT	GGGAATTCTC	TAATTGTATC	ATGTGGGCCT	TTTGAAAGTA	240
ACAAACAGAA	GGCCAGTCTG	TTGCAAGTTT	GCTGCTGAAC	ATCACATTCC	ACCCTAAGAA	300
AACACAAGGT	GGATTGCATC	GAGGGTGGAT	ACCTTACCTT	AGCACAGA		348

(2) INFORMATION FOR SEQ ID NO:1424:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 152 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1424:

GAATTCGCGG CCGCGTCGAC TTGGAGAATG TGGCCTCTGA TCACTAACCA GGGTTTTCTC	60
TTTACACTGG CTGTTTACT TATTTCTTCA CCAAAGCCAG GGAACGTCCC TTTAGCTACT	120
GCAGCATTTT TAACAGATGC GACAAATCAC AG	152

(2) INFORMATION FOR SEQ ID NO:1425:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 206 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1425:

GAATTCGCGG CCGCGTCGAC CTAAACCGTC GATTGAATTA GACCTGCCTC GAGATGCGCC	60
ACTTTCTGCT CACCCACCTT AGAGCCTTTG CATATGCAGT TGCTTCCTCA GAGTATTGCC	120
ATCCCCAGCA CGACCCCCAG CTCATTCTTC AGGCCACTAA CGTAAATGTT ACTTTCTCAA	180
AAACACCCTC TCCATCCCGG CACCCA	206

(2) INFORMATION FOR SEQ ID NO:1426:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 353 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1426:

GAATTCGCGG CCGCGTCGAC GTGGGTACTT CATCCTCCTC ATCACTGGTT GGCCTGAGA	60
GCTTCTTAAG ACGCTCCATG AGCTCTTTCT CTCTCCATC ATCATCCACA TCCTTCTTCC	120
GCCTGCCTTT TCGGGTATCT CGCTTTTTTT TTTGCTGCTG TTGCTGTTGC TGCTGCTGCT	180
GCTCCTTCTC CTTGAGCACT TTCTCTTCTT CCCCAGCCTG TTTATCTTCT ACTGCCAGCT	240
CTTCAAAGAA CGTTTTTTTG ATCTTCTNGT CCTTCTTCCC TTTCTTCACC ACTTTGTCTG	300
ATGGGCTCGT GCTCTCTCCG TCCCCGATCC ACTCGGGCTC CGGCGGACTC GAG	353

(2) INFORMATION FOR SEQ ID NO:1427:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 343 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1427:

GAATTCGCGG	CCGCGTCGAC	AGATATTTGG	TTATCTTGAC	TTTTTAAAT	AACATATTTT	60
TACAGGATTT	TGAGTCTGAG	AAGAGAAAGG	TAATATGCAA	GACACTTCGA	TTGTTCGAC	120
ATTATTATGG	AGCATCATTA	ATGGTTTGTA	CATTTCTTGT	CCTTTGGGCT	TGAATGGACA	180
GTACCAAATT	TGGGAAATC	AGCAACTTGA	TGCACAGCTA	CGAGGAATAA	ATGCTTTTGC	240
TAATGCACAT	GGTCCCGTTG	CTTCCCCT	GCTGAAGACC	TCTCCTTACA	GAGTGTTTGA	300
TAATGCATCT	GTTGAACATG	CACTGCTAGA	TGCTCCTCTC	GAG		343

(2) INFORMATION FOR SEQ ID NO:1428:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1428:

GAATTCGCGG	CCGCGTCGAC	GAGGGGAAGA	TGTCACGCAA	GATAGAAGGC	TTTTTGTTAT	60
TACTTCTCTT	TGGCTATGAA	GCCACATTGG	GATTATCGTC	TACCGAGGAT	GAAGGCGAGG	120
ACCCCTGGTA	CCAAAAAGCA	TGCAAGTGCG	ATTGCCAAGG	AGGACCCAAT	GCTCTGTGGT	180
CTGCAGGTGC	CACCTCCTTG	GACTGTATAC	CAGAATGCCC	ATATCACAAG	CCTCTGGGTT	240
TCGAGTCAGG	GGAGGTCACA	CCGGACCAGA	TCACCTGCTC	TAACCCGGAG	CAGTATGTGG	300
GCTGGTATTC	TTCTGGGACT	GCAAACAAGG	CCCGGCTCAA	CAGTCAAGGC	TTGGGTGTG	360
CCTGGCTCTC	CAAGTTCAG	GACAGTAGCC	AGTGGTTACA	GATAGATCTG	AAGGAGATCA	420
AAGTGATTTT	AGGGATCCTC	ACCCAGGGGC	GCTGTGACAT	CGATGAGTGG	ATGACCAAGT	480
ACAGCGTGCA	GTACAGGACC	GATGAGCGCC	TGAAGTGGAT	TTACTACAAG	GACACTCTCG	540
AG						542

(2) INFORMATION FOR SEQ ID NO:1429:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1429:

GAATTCGCGG	CCGCGTCGAC	TTAAGAGTCT	GCTTCGGAGA	CCGTAAGGAT	ATTGATGACC	60
ATGAGATCCC	TGCTCAGAAC	CCCCTTCCTG	TGTGGCCTGC	TCTGGGCCTT	TTGTGCCCCA	120
GGCGCCAGGG	CTGAGGAGCC	TGCAGCCAGC	TTCTCCCAAC	CCGGCAGCAT	GGGCCTGGAT	180
AAGAACACAG	TGCACGACCA	AGAGCATATC	ATGGAGCATC	TAGAAGGTGT	CATCAACAAA	240
CCAGAGGCGG	AGATGTCGCC	ACAAGAATTG	CAGCTCCATT	ACTTCAAAAT	GCATGATTAT	300
GATGGCAATA	ATTTGCTTGA	TGGCTTAGAA	CTCTCCACAG	CCATCACTCA	TGTCCATAAG	360
GAGGAAGGGA	GTGAACAGGC	ACCACTAATG	AGTGAAGATG	AACTGATTAA	CATAATAGAT	420
GGTGTTTTGA	GAGATGATGA	CAAGAACAAT	GATGGCATACT	TCGAG		465

(2) INFORMATION FOR SEQ ID NO:1430:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1430:

GAATTCGCGG	CCGCGTCGAC	GCTGTTCATG	AGGAGACTTA	ACCACAATTC	AAAGTGTAGC	60
AGTTGTGTAT	TTTAGCATT	TAATATTGA	TTGAGGCCCT	GAGGTGTTAA	TATCTCAATC	120
TCAGAGTTAG	ATGTTTCATG	CCTTTTTGAA	TTTTTTAAAC	ATTTTTCATA	ATTTTTTTTT	180
TAAGTTAGGG	AGCACATTGA	GTGAAGTTCT	CTGTGTAGAA	CAATACCTTC	TGCTCTGCTT	240
CTCCAGCTT	TCACTGAGGG	CTGGAAAAGG	ACAGGCCTGT	CCAGCTGTAC	TGTCCCACTG	300
TGTATGGGGA	AGCTCAGGCT	CTGGTGAAG	CAGGGGGCAT	GGATGTCAA	CAACTGATGT	360
GCAAACACTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:1431:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 632 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1431:

GAATTCGGCC	TTCATGGCCT	ACTACTGATG	AGAACATTAT	CTGCATATGC	CAAAAAATTT	60
TAAGCAAATG	AAAGCTACCA	ATTTAAAGTT	ACGGAATCTA	CCATTTTAA	GTTAATTGCT	120
TGTCAAGCTA	TAACCACAAA	AATAATGAAT	TGATGAGAAA	TACAATGAAG	AGGCAATGTC	180
CATCTCAAAA	TACTGCTTTT	ACAAAAGCAG	AATAAAAGCG	AAAAGAAATG	AAAATGTTAC	240
ACTACATTAA	TCCTGGAATA	AAAGAAGCCG	AAATAAATGA	GAGATGAGTT	GGGATCAAGT	300
GGATTGAGGA	GGCTGTGCTG	TGTGCCAATG	TTTCGTTTGC	CTCAGACAGG	TATCTCTTCG	360
TTATCAGAAG	AGTTGCTTCA	TTTCATCTGG	GAGCAGAAAA	CAGCAGGCAG	CTGTTAACAG	420
ATAAGTTTAA	CTTGCATCTG	CAGTATTGCA	TGTTAGGGAT	AAGTGCTTAT	TTTTAAGAGC	480
TGTGGAGTTC	TTAAATATCA	ACCATGGCAC	TTTCTCCTGA	CCCCTTCCCT	AGGGGATTTC	540
AGGATTGAGA	AATTTTTC	TCGAGCCTTT	TTAAAATTGT	AGGACTTGTT	CCTGTGGGCT	600
TCAGTGATGG	GATAGTACAC	TTTTCACTCG	AG			632

(2) INFORMATION FOR SEQ ID NO:1432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1432:

GAATTCGGCC	TTCATGGCCT	ACTAATTTC	AAGAGCTAAA	CTTTATACCG	CCTGCAATAT	60
TTCCATTTAC	TACCAGTTT	TTTCTGACCT	AGTCAGATAT	AAGAAGCCCC	CTTACTGGAT	120
ACAAGACAGT	TAATTATCAG	ATCCAGTCTG	ATCCTAGATC	CAGTCTGATC	CTAGACCCAG	180
TCCAGTTTCT	GTTGTGACTT	CCAAACCCAG	TTGGATCAG	AAATTGCTC	AAAGAACTA	240
GGAGAGCTCA	AAACACAAAT	ATGTGGAGCT	TCTGAATCTG	AGAGAGAACG	AACTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1433:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1433:

GCGTGGTTTC	ACCTTGTTGG	CCAGGCTAGT	CTTGAAGTCC	TGACCTCAGG	TGATCCACCC	60
ACCTCGGCCT	TCCAAAGTGC	TGGGATTACA	GGCATGAGCC	ACCGCATCTG	ACTGGTGCAC	120
TTTACTTTGA	CCTGTCATAA	ATCCCTTGGT	TTGTTATTAC	TAGTTTTTAC	TTTAGACAGC	180
AATTATCTTT	CAAGGAAAAA	TTTAAAAGGA	AAAAATGTCT	TATATTTACC	CTCATGTTTA	240
CCATTCCCAG	TGCTCTTTAT	TTCTTTATGT	CAATCCGGAT	TTCAATTGTG	TATCATACTG	300
TTTCTGCCTG	AATAACAGTT	TAACAGCAAC	TCGAG			335

(2) INFORMATION FOR SEQ ID NO:1434:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 316 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1434:

GAATTCGGCC	TTCATGGCCT	AATGCTCTGT	GTCAGTGTCT	CCCGGTGCTC	AGCACAGACA	60
AGTTCAAGAC	AGATTTTTAT	GATCAATGCA	ACGACGTGGG	GCTCATGGCC	TACCTCGGCA	120
CCATCACCAA	AACGTGCAAC	ACCATGAACC	AGTTTGTGAA	CAAGTTCAAT	GTCCTCTACG	180
ACCGACAAGG	CATCGGCAGG	AGAATGCGCG	GGCTCTTTT	CTGATGAGGG	TACTTGAAGG	240
GCTGATGGAC	AGGGGTCAGG	CAACTATCCC	AAAGGGGAGG	GCACTACACT	TCCTTGAGAG	300
AAACCACTGT	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:1435:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 383 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1435:

GAATTCTAGA	CCTCCCACCC	TGTAGAACAT	TCTCCTCACT	TAGGAGATAG	TCATATTTTC	60
AGGCTGCCTT	TGAAACTGTG	GGTACACAAA	CAGCAGAGCG	ATCTATTTC	GCAGTTGAAG	120
TTGTATTTGA	GCCATTATTT	CTTCCACTCT	CTTTTGGTT	GAGTTTCTAG	GAAGGAAAGG	180
GCTGAACTCC	ATGACTGCTC	ATATTACAGT	GCTAAGTCCT	CACAGCCATC	CACTGTTTAT	240
ACACAAGAAG	AACTAGGCC	CACCAAGAGT	AAGCGCCTGC	CTGAGGTCCG	TGAGTGAGTA	300
AGGGCCAAAG	GTGAGTTTGG	GATCTGGCCC	TTTCTCTTTT	CTGGCCACCA	CAGGGCACTA	360
CCTCCCATAC	CCACACACTC	GAG				383

(2) INFORMATION FOR SEQ ID NO:1436:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 303 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1436:

```

GGAGAACTGC TAAGGTCCAC AACGTCGACA ATTGAAAGCT TTGCTGCACA AGAAAAACAA      60
ATGGAAGTTT GTGAAGTATG TGGAGCCTTT TTAATAGTAG GAGATGCCCA GTCCCGGGTA      120
GATGACCATT TGATGGGAAA ACAACACATG GGCTATGCCA AAATTAAAGC TACTGTAGAA      180
GAATTAAAAG AAAAGTTAAG GAAAAGAACC GAAGAACCTG ATCGTGATGA GCGTCTAAAA      240
AAGGAGAAGC AAGAAAGAGA AGAAAGAGAA AAAGAACGGG AGAGAGAAAG GAAAGAAGTC      300
GAG                                                                    303

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(2) INFORMATION FOR SEQ ID NO:1437:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 228 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1437:

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GAATTCGGCC TTCATGGCCT AGACTTTTAC ACATTTTAT TAGCTACCTG GAATTATTTT      60
TGTAACACGT TAAGTGTAAG TAAACAAATA ATGCTTTGCT TTTTGTTTTC TGGAATTATT      120
GTTGTATTTT TTTGCCAAAT GCATATATCT TCAGGTCCTT TTTTATAAC CATATGCATA      180
CCAAGGCACC ATTCCATTGA CTTTCCAAC TCTGTCCCAA CCCTCGAG                    228

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(2) INFORMATION FOR SEQ ID NO:1438:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 498 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1438:

```

GTGAATTCCA GTCCCCACCC AGAAACCCGC AGCATGATTG TCTGCCTCCT TTTCATGATG      60
ATTTTATTGG CAAAGGAAGT TCAACTGGTA GACCAAACAG ATTACCTTT ACTTAGTCTC      120
CTTGGACAGA CAAGCTCACT TTCATGGCAT CTTGTGGATA TTGTGTCGTA CCAGAGTGTG      180
CTAAGTTATT TCAGCAGCCA TTACCCGCCG TCCATCATCC TGGCAAAAGA ATCTTAGTCT      240
GAATTAATCA TGAAGCTCCT AAAAGTGTCT GCGGGCCTT CTATTCCTAC TGACAGCCAG      300
AAGCATCTTG ATGCAGTTCC AAAATGCCAA GCTTTTACTC ATCAGATGGT TCAATTCCTC      360
AGCACCTTGG AACAAAATGG AAAAATCACC TTAGCAGTCC TAGAACAGGA AATGTCTAAG      420
CTCTTAGACG ATATCATTGT CTTTAACCCG CCCGACATGG ACAGCCAGAC CCGCCACATG      480
GCCCTCAGCG GTCTCGAG                                                                    498

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(2) INFORMATION FOR SEQ ID NO:1439:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1439:

GAATTCGGCC	TTCATGGCCT	AGCAGGGAGA	GGGGTTCTGT	GCTCCTGAGA	TTAGTTCAGA	60
TGGTCTAACC	ATTGTTCTAT	ATGTGCATTT	TAGTTAATAT	TGTGTATTAA	AGGATAAGTC	120
TTAATGCTCA	AAGTATGTTA	AAAATAGATG	TAGTAAATCA	GTCCCTTTGT	GAATGTCCTT	180
TTGTTAGTTT	TTAGGAAGGC	CTGTCCTCTG	GGAGTGACCT	TTATTAGTCC	ACCCCTTGGA	240
GCTAGACATC	CTGTACTTAG	TCACGGGGAT	GGTGAAGAG	GGAGAAGAGG	AAGGGTGAAG	300
GGAAGTGGCT	CGAG					314

(2) INFORMATION FOR SEQ ID NO:1440:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 424 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1440:

CCAGCCGTCT	GCAGTCCGG	CCGCCACTTG	CGCTCTCCA	GCCTCCGAG	GCCCAACCGC	60
CGCCAGCACC	ATGGCCAGCA	CCATTTCGC	CTACAAGGAG	AAGATGAAGG	AGCTGTCGGT	120
GCTGTGCTC	ATCTGCTCCT	GCTTCTACAC	ACAGCCGCAC	CCCAATACCG	TCTACCAGTA	180
CGGGGACATG	GAGGTGAAGC	AGCTGGACAA	GCGGGCCTCA	GGCCAGAGCT	TCGAGGTCAT	240
CCTCAAGTCC	CCTTCTGACC	TGTCCCCAGA	GAGCCCTATG	CTCTCCTCCC	CACCCAAGAA	300
GAAGGACACC	TCCCTGGAGG	AGCTGCAAAA	GCGGCTGGAG	GCAGCCGAGG	AGCGGAGGAA	360
GACGCAGGAG	GCGCAGGTGC	TGAAGCAGCT	GGCGGAGCGG	CGCGAGCAGC	AGCGCGGGCT	420
CGAG						424

(2) INFORMATION FOR SEQ ID NO:1441:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 346 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1441:

GAATTCGGCC	TTCATGGCCT	ATAGGCCATG	AAGGCCGGCC	TTCATGGCCT	AGTCAGGCTT	60
AAGTTTAATA	AATAGCAAAT	TGCATACAGA	TATTACAAT	GATCGAAAGA	CAAACAGAGG	120
TCCTATCCGT	GCAGTCCCAA	CAATAAAGAC	AGGCATTGGC	ATAAAGTGT	TATAAATTCT	180
TGGGTACAGC	TGTTCTGAAA	GTAAAGTTCA	CTTTCAATCC	TAAAAAAGT	CCGCTATTCC	240
TCCCTGGCTG	CTCTGGACTG	TCCTCATCCT	CTTTAGCTGC	TGTTGCGCCT	TCCGCCACCG	300
ACGAGCTAAA	CTCAGGCTGC	AACAACAGCA	GCGGCAGCAT	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:1442:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 591 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1442:

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GAATTCGGCC TTCATGGCCT AGGCTTCCCT GTTCCCTCAG CCCAGTCGA GAGGAAAGAG      60
AATCGGGCCA CTGCCAGAAA GAGAGTCAAG CAAACCTGGA AGGGCAAATC TGAGAGTGGG      120
AAGGCCAAAG GCCGAGGCC AGATTAGTA TTCACTAGCA GCGCCTTCGG GTAGCAGGAT      180
GATTCCTTTT CCTGCCTGTC TGCTGCTGGC TCTCTTCCCT AAGGTACAGG TTGGCAGGAC      240
CACCTCCGCC TACTTCTCCA CCATCCCTAG CATGCCAGCC CGTCCCAGA TCAACCTGCC      300
AGTGGAGTCA GGCAGTGCAC TCCTGGAGCC AAGAGGGAAG GGCAGGGTAG AGAGGGTATG      360
TCCAGTAGCC TGGAGCTCCA TGGTGGCTTC ATGCCTCCCT TCTCCAGCT CAGGTGGCCC      420
TGAGGGCTCC CTCGGAACAG TGCCTCAAAT CCTGACCCAA GGGCCAGCAT GGGGAAGAGA      480
TGGTTGCAGG CAAAATGCAC TTTATAGAGA TTTTCTATTG CTGGGAAGGT GTGTTTCTCC      540
CACAATTGTG TTGTGAATAT TCACTTGTTT TATAAATGTC TGACCTGTCC G      591
```

(2) INFORMATION FOR SEQ ID NO:1443:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 526 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1443:

```
GAATTCGGCC TTCATGGCCT AGATTGAATT ACCTGCCTCG AGCTCCTGTC CTTAGGTGAT      60
CTGCCCCTCT TGGCCTCCCA AAGTGCTGGG ATTATAGGAG TGAGCCACCT GGCCAGCTA      120
GCTTTTAAAG TTCTGCCAGC ATAGCCCCGG GATGGGGTGG GGGTAGACAG GGCTTAGGA      180
CTTTCATTTT TAAATGCTC ACTCCACAGT GAAGAAACAG GTGATGACTA TCCTGAATAT      240
TTGGGAAGCT GTGTCCTAGA ATTTTGGCC TCAGTTCAG AACCACAGC TTCTTTACAA      300
CATGCTTCAA GCCTGGGACT GAGTGCCAG TAAATAAACC CCTAGTAACC TTAATATGGG      360
TTAATAAGAT TAGGTGCCCC CTCTGCACGC TCCCTGCCC CTCCTCGTCC GGGCACCTGT      420
TATGCTAGGC CAGCATGTTT GCAGCTTAGC CAGGAAAAT CGTGGACCAA GACAGGGCTT      480
TTCATCCACG ACTGGCTAAA AAGATGGCTC TCAATAATAT CTCGAG      526
```

(2) INFORMATION FOR SEQ ID NO:1444:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 279 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1444:

```
GATTGAATTC TAGACCTACC TCTCTTTTTT TGTGGTCTCT CTTTCATTCT CTGTTCATTT      60
CTCCGTGAGA TTTTCTGATT AGTAGTTACC TTCAGCATGC CAGTTGACTT GCAAACCTAC      120
AATCCAACCT TTCTTCTACT TTGTCATCTG ACAACAGCCT GGTGTGTAGC TGATTCCAGG      180
ACTTCTTCAC TTGGGTGGCC ACTCTCATTA CCACAGAGTT CACTAGTCAT GGTGAACACA      240
CCAGTCTTTT ACACCTCCCT CACTCCCAA CCACTCGAG      279
```

(2) INFORMATION FOR SEQ ID NO:1445:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 644 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1445:

```

GAATTCGGTC TTCATGGCCT AGGGAAGAA AGGCACCTTT CTCACAGGT GGTGAGAGAG      60
AGGAAGGGGG ACGGGGAAAG CCCTTTATAA AAGCATCAGA TCGGCTGGGC ACAGTGGCTC      120
ACGCGTGTA TCCAGCACT TTGGGAGGCC GAGGCGGGTG GATCGCGGG TCGGGGGTTT      180
GAGGCGGGC TGGCCAATAT GGTGAGACCC CGTCTCTGCT GAAGATACAA AAATTGGCTG      240
GGCATGGTGG CGGGCACCTG TGGTCCCGGC TGCTTGGGAG GCTGAGGCGG GAGAATCGCT      300
TGAGCCCGGG AGGCAGAGGT TGCAGTGAGC TGAGATCGCG CTAAGTCACT CCAGCCTGGG      360
CAACAGAGCG AGACTCCATC TCAAAAATAA AAGAAAGGCA TAAATATTAC ATTACCCTCT      420
GAATACTGTG GTTGATACT TGAGTTTTTA TGTGTGTATA TATATGTGTA TAGGAGAGTA      480
AAAAATAAAT GAAATTAGGA TTTTGCAAGT TATAATCATA TAAAATTGAT TACCCTAAAT      540
ATATCATTAG GATATTATGT TATTACATC TCTTATGCTA ATTCTAATTT TCTTTTATTG      600
TAGTATAGTA GAATTGAGAT TTGNNATGG AATTGGTCCT CGAG                                644

```

(2) INFORMATION FOR SEQ ID NO:1446:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 756 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1446:

```

GAATTCGGCC TTCATGGCCT ACCTCACCCG GCCCGGACAC GGACAGGATT GACAGATTGA      60
TAGCTCTTTC TCGATTCCGT GGGTGGTGGT GCATGGCCGT TCTTAGTTGG TGGAGCGATT      120
TGTCTGGTTA ATTCCGATAA CGAACGAGAC TCTGGCATGC TAACTAGTTA CGCGACCCCC      180
GAGCGGTCGG CGTCCCCCAA CTTCTTAGAG GGACAAGTGG CGTTCAGCCA CCCGAGATTG      240
AGCAATAACA GGTCTGTGAT GCCCTTAGAT GTCCGGGGCT GCACGCGCGC TACACTGACT      300
GGCTCAGCGT GTGCCTACCC TACGCCGGCA GGGCGGGGTA ACCCGTTGAA CCCCATTCGT      360
GATGGGGATC GGGGACTGCA ATTATTCCCC ATGAACGAGG AATTCCAGT AAGTGCGGGT      420
CATAAGCTTG CGTTGATTAA GTCCCTGCCC TTTGTACACA CCAACCCGTC ACTGACTTTT      480
ACCGCAGCTG GAACTGTGCT CCAGGGCCTT TCCATCTTTT CCCCCACACT CCCTTTGACC      540
CTGTGTTGCC CTCAGAGGCC AAATTCTTGG GCTCAGGGAC TGGCTTTTCG CCTATTGGTG      600
GTGGAGCTGG GGTTCCTGGCA AGGAATTTCA GGCAGCGCTT GGAGGCAATG TTCCCCGAGA      660
GCAGTTCACG GTGGTGATGT TGACTTATGA GCGGGAGGAA GTGCTTATGA ACTCTTTAGA      720
GAGGCTGAAT GGCCTCCCTT ACCTGGAAC CTGAG                                756

```

(2) INFORMATION FOR SEQ ID NO:1447:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1447:

```

GAATTCGGCC TTCATGGCCT ACCTGCCTCG AGGTCACCTGG GATCATCTGA ACAGAAGTGC      60
ACAGGCTACT TGTACAGAGA AAAAATTAAT ACTCAAAGGA AATCTTCATT TTTTAGATTG      120
ACTTTGGGAA TTTGAATTTT CATCAGTGCA AATATAAATT TCTCTATCCT GCTCTGAGGC      180
TAATTGGTAC CATATTTTCC CTTTGTGTCT TGTGACTCTG CCACATCCCA TCTCATCCTG      240
GCCTCTGAGT CAAGAACCCA GTGAACTGAC TTTCTAGTTC TAGAAGTTCC GCTGCAAGGC      300
CAGGAAAGCT TGAGAAAGGT ATTGTGGAAG AAGCAAAGGT AGACCCCATC TCACTCGAG      359

```

(2) INFORMATION FOR SEQ ID NO:1448:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 146 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1448:

```

GAATTCGGCC TTCATGGCCT AGGGAAAATA AGTTAATTCT AAATCAAATC TAAATATTAT      60
ACCTCATGCT ATGGTTTTAT TTTATTTTCTG TGCTGCCGTT ACTTTTCCTC CCCAAAGCAA      120
TGTGTTTTCC AGCCACAACC CTCGAG      146

```

(2) INFORMATION FOR SEQ ID NO:1449:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 308 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1449:

```

GAATTCGGCC TTCATGGCCT ACTTTTCAAA AGCAGCTTTG CTCTACTGAT TTGGGTAAAA      60
GCTTAGTTGC AGTTGGNTTG GGAGGAAATG GGAGCAGAAA ATTTGAGAGA GTGAGTGTAG      120
ACAACTCTTT CAAGGAATTT CGCTATAAAT GGGAGTAGAG ATCTGAAGAC TGAATAATTA      180
GCAAACTGAA AAGTGGGAAG ACGTAATTCT CTTATTATTT CATTTTCTT AGTGAAATAA      240
GAGGTGAAGT TCTCTGAGTA ATAGGAGGGT CAAACAGGNG TTAGAAGTTC ACAAAGAAAG      300
GTCTCGAG      308

```

(2) INFORMATION FOR SEQ ID NO:1450:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 545 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1450:

```

GAATTCGGCC AAAGAGGCCT AGCATGTTGT GGCTGTTCCA ATCGCTCCTG TTTGTCTTCT      60
GCTTTGGCCC AGGGAATGTA GTTTCACAAA GCAGCTTAAC CCCATTGATG GTGAACGGGA      120
TTCTGGGGGA GTCAGTAACT CTTCCCCTGG AGTTTCCTGC AGGAGAGAAG GTCAACTTCA      180
TCACTTGGCT TTTCAATGAA ACATCTCTTG CCTTCATAGT ACCCCATGAA ACCAAAAGTC      240
CAGAAATCCA CGTGACTAAT CCGAAACAGG GAAAGCGACT GAACTTCACC CAGTCTACT      300

```

```

CCCTGCAACT CAGCAACCTG AAGATGGAAG ACACAGGCTC TTACAGAGCC CAGATATCCA 360
CAAAGACCTC TGCAAAGCTG TCCAGTTACA CTCTGAGGAT ATTAAGACAA CTGAGGAACA 420
TACAAGTTAC CAATCACAGT CAGCTATTTT AGAATATGAC CTGTGAGCTC CATCTGACTT 480
GCTCTGTGGA GGATGCAGAT GACAATGTCT CATTGAGATG GGAGGCCTTG GGAAACACAC 540
TCGAG 545

```

(2) INFORMATION FOR SEQ ID NO:1451:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 331 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1451:

```

GAATTCGGCC AAAGAGGCCT ACAGTAAGCA GATGAACTTG CTTGCTGTTC TCGAAGTGAG 60
GACTGAAGGG AACGAAACT GGGGTGGGTT TTTGCGCTTC AAAAAGGGGA AGCGATGTAG 120
CCTCGTTTTT GGACTGATAA TAATGACCTT GGTAAATGGCT TCTTACATCC TTTCTGGGGC 180
CCACCAAGAG CTTCTGATCT CATCACCTT CCATTACGGA GGCTTCCCCA GCAACCCCG 240
CTTGATGGAC AGCGAAAACC CAAGTGACAC AAAGGAGCAT CACCACCAAT CCTCTGTAAA 300
TAATATTTCA TACATGAAGG GAACCCTCGA G 331

```

(2) INFORMATION FOR SEQ ID NO:1452:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 263 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1452:

```

GAATTCGGCC AAAGAGGGAA GGGAAAATT CAAGTCAGAT AGAATTCTAT ATATACCATT 60
TCTTTGGAAC CTTAGCCCT CAAGATTCCA ACATCATGAC CTCAGTTTCA ACACAGTTGT 120
CCTTAGTCCT CATGTCACTG CTTTGGTGC TGCCTGTTGT GGAAGCAGTA GAAGCGTATA 180
TGCACGAAAA AGAAATGGAC AGATGTGACT TTGAAAGGCC TACTGAGTCA AACCTCACCC 240
TGAAAACCTT TGCAGCACTC GAG 263

```

(2) INFORMATION FOR SEQ ID NO:1453:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 558 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1453:

```

GAATTCGGCC AAAGAGGCCT AATTTTAAAG CCCTGCTAAC TTCAATGTCT AGGTCACCCA 60
TTTGTATTATT TTTATGGTCT TTTTTCATCC TGATTTTGGG TCATTTGGTC CCGTCTTATG 120
GCATACCTGG TAATATTTTA TTGAATCCTT AGTACTGTAC ATGAAAAATT GTAGAGGCCC 180
CAGTAGTTTT CTTTCTCTGA AGAGGAGTCA CCCTTTCCTT CACTAGACAG TTATGTTGGG 240

```

GGTTATATAC	CTTACTCCAA	TCAAAGATTG	AGCTGAGTCA	GAACTCTAAG	GGAGTTAAGT	300
TTTTGTGTCC	TCTGGGGACC	AGGGGTTCCA	ACTAAGACTG	TGATATTCAC	CAGGATCCAA	360
TTTCCCGATG	CCTCTTGAAC	TCTTATTCTT	ATCTTTTAA	CACATCAAGG	CAGCTGGTTT	420
GCATTTTCT	TTCTGTTTCT	CTTTTCTT	TCATCCTTG	CAGCTTTAGA	AATTGACAGT	480
TGTCTTACAG	GGAAAAGTAG	CTGTGTAACA	AGCTCATGTC	TCTGCCTCTC	TTCCACTGAT	540
ATCTTAGCCC	CGCAGGAG					558

(2) INFORMATION FOR SEQ ID NO:1454:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 328 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1454:

GAATTCGGCC	AAAGAGGCCT	ACCTAAACCG	TCGATTGAAT	TCTAGAAATA	CAATGATTTT	60
AAAAAAGATT	TCCAAAGGCT	TTTTCTTTT	TTCTTTTTTC	TNGAGACAGG	GTCTCACTCT	120
GTCGCCCAGG	CTGGAGTGCA	GTGACACAAT	CTCGGCTCAC	GGCAAGCTCC	GCACTGCCCC	180
CTCAGGTTCA	CGCCATTCC	CCGCCTCAGC	CTCCGAGCA	GCCGGGACCA	CAGGCACGCG	240
CCACCACGCC	CAGCCAACCT	TTACATTTT	AGTAGAGACG	GGGCTTCACC	ATGTTGCGCA	300
GGATGGTCTC	GGTCTCTTCT	GCCTCGAG				328

(2) INFORMATION FOR SEQ ID NO:1455:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 481 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1455:

GAATTCGGCC	AAAGAGGCCT	ACTTGATGTC	TGTGACCCAC	ACNTATTTCG	ACACTCCCTC	60
CCCTTTTGAA	AATCCCTAAT	AAAAACTTGC	TGGTTTTTGC	GGCTAGTGGG	GCATCATGGA	120
ACCTACTGAC	ATGTGATGTC	TCCCCCGGAT	GCCCCGCTTT	AAAATTTCTC	TCTTTTGTAC	180
TCTGTCCCTT	AATTTCTCAA	GCTGGCCGAT	GCTTAGGGAA	AATAGAAAAG	AACCTAGGTG	240
AATATTGGGG	CAGGCTCCCT	GATGAAATGA	TATATATTCT	TAAAATAAAC	TTTTCATCTT	300
TGCATATACG	TTTATATGCC	GAGTTTCTC	CAACCTTGTC	TTACAGCACT	TTGTATACTA	360
CATTCTAGCC	ATACTAAACT	CTTGCACTTC	CTGAGACATG	TGCTGTATCC	TATTTCTTCT	420
GGTCCTTTTC	TCATTGATTA	ACTACCTGGA	GCATACTTTT	AATTCAGTGT	CAGCGCTCGA	480
G						481

(2) INFORMATION FOR SEQ ID NO:1456:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 393 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1456:

```

GAATTCGGCC AAAGAGGCCT ACTTCACCTT CAAGTCCCCT TTCTCAAGAA TCCTCTGTTC      60
TTTGCCCTCT AAAGTCTTGG TACATCTAGG ACCCAGGCAT CTTGCTTTCC AGCCACAAAG      120
AGACAGATGA AGATGCAGAA AGGAAATGTT CTCCTTATGT TTGGTCTACT ATTGCATTTA      180
GAAGCTGCAA CAAATTCCAA TGAGACTAGC ACCTCTGCCA AACTGGATC CAGTGTGATC      240
TCCAGTGGAG CCAGCACAGC CACCAACTCT GGGTCCAGTG TGACCTCCAG TGGGGTCAGC      300
ACAGCCACCA TCTCAGGGTC CAGCGTGACC TCCAATGGGG TCAGCATAGT CACCAACTCT      360
GAGTTCCATA CAACCTCCAG TGGGATCAGC ACG                                     393

```

(2) INFORMATION FOR SEQ ID NO:1457:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 266 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1457:

```

GAATTCGGCC AAAGAGGCCT AGTGTGTGTG TGTGTGTGTG TGTGTGTGTT TTATCTCCTT      60
CAACTCTGAC CACCTGGAAG TCAGCCTAAT CTCTGCCCTC GTGTTGATCT TTAATTCAAC      120
ATTTAATTAC CTATCTTGGT ATCCATATGA ATTTGATTGT TTTTGGCT TTTTGAAC      180
TCATAAAAGG TATCCAAGTT CCTGGAGGGC ATAGTGCCCA TCTCTCCCA TCCACCACTG      240
GACATTCTTT TCCAAAAGAC ACATGG                                     266

```

(2) INFORMATION FOR SEQ ID NO:1458:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 292 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1458:

```

GAATTCGGCC AAAGAGGCCT AGGTTGTAAGT TACTTTCAGA GTAGATACAG GGTTTTAGAT      60
CATTACAGTT TAAGTTTCT GACCAATTAA AAAAACATAG AGAACAAAAG CATATTTGAC      120
CAAGCAACAA GCTTATAATT AATTTTATT AGTTGATTGA TTAATGATGT ATTGCCTTTT      180
GCCCATATAT ACCCTGTGTA TCTATACTTG GAAGTGTGTT AGGTTGCCAT TGGTTGAAAA      240
CATAAGTGTC TCTGGCCATC AAAGTGATCT TGTTCACAGC AGTGCTCTCG AG          292

```

(2) INFORMATION FOR SEQ ID NO:1459:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 289 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1459:

```

GAATTCGGCC AAAGAGGCCT AGTTTTATGA GAGGGTTTCC ATTAAGAAGT TAATTGAAAT      60
TCTTTATTTA TGTAATAATGA AATTTCATAT TAAATTATTT CACACAGCAT TTTTCCCCTT      120
TAATTTTATT AGTTTTTTTA TTTCTTGGCC GACCCAGGCC AGGAGCTTAG GGAAAATGAT      180

```

GAGGCCTCTT TTACGCTGTA GTCCTGCAAA TGCTGTGTTT TATTCCCCCT CCCCTGCTCA 240
GCACTCACCC ACGACTGACA CATGGGGTAC ACACACACAC ATACTCGAG 289

(2) INFORMATION FOR SEQ ID NO:1460:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 330 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1460:

GAATTCGGCC AAAGAGGCCT ACACCTGCGT TGGAACATCT GATCCAGTGA TAGCACGTCA 60
CTAGGTGCCT TAATTAATAA AGCCAAAATA TCTTCCACT AGCAAATAA TCGTATTCAC 120
TTTACTCTC CCATTTTAA TTAATCTTTC CTATTTTATT TCACCCTCTC ATCTCTTCC 180
TCTATTGGAT TATCTCAGGT ATCTAATCCA ATTCATACT GTTTAATGAA TGTAATTGCA 240
ACCAGTCTGC AATTCCTAAG GTTTGTGTTT TTTGCTTTT TCTTTTGTAG TCCATCTCTT 300
TGCTACACTC AAGCAGGTCT AGAATTCGAG 330

(2) INFORMATION FOR SEQ ID NO:1461:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 383 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1461:

GAATTCGGCC AAAGAGGCCT AGGGACAGTG ATTATAGGAC TCCACACATG CAACTGAATC 60
TAGCATTACT GACTTTAAAT TTTTGTAGCC TATCTAAAGG CCAGATGCTA TCAGCAGCTG 120
AACGGCATCT ACCAAACCA GCTGCAAAGA TAGAAGCGGA ACAACTGGTT TGGTGGAGAG 180
ATTCGATAAC AACGAGTTGG GAAATAGGTA AAATAATAAC ATGGGGTAGA GGTATGCTT 240
GTGTTTCTCC AGGCCAAAAC CAGCAGCTGA TTTGGATACC ATCAAGATAC CTGAAAACCT 300
ATCATCAGCC AGATGCCAAG GAAGAGATTT TGGGAGGAAC CCGAGGACCC CATGTTATTA 360
TTTTACCTAT TCCCAACTC GAG 383

(2) INFORMATION FOR SEQ ID NO:1462:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 375 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1462:

GAATTCGGCC AAAGAGGCCT ACGATGACGT CACCGTCACC ACCGGCGTGA AGCGAGACAG 60
TGGTGAGGCG TTCTGGACTG GATGGAGGAC CTGAAGACAT GAGGTGGAGG CACAGGTAGA 120
AGAGAAGATT CTCACCATCG CTGATTCACA CAAAAGCATT TCTCCAAGTG GTTCAGATG 180
ACATGATTTT CCAAAGTGTT AGAGCTGAAG TGTGTTTCCT TGTGTATATA TACTGTGGTT 240
CCTTTATCCC TTCATCTGTG GATAGACAGG TGCAACCGTG TGGTTCCCA CGATATGATT 300

TCATTGTGGT TTTCTGTCTG AAGAGTATCC CAGTATGTAC CTGTGGAGCA GCTTCTTTAT 360
CCCTTCTTAC TCGAG 375

(2) INFORMATION FOR SEQ ID NO:1463:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 174 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1463:

GAATTTGGGC GGAGACACAA ATTCAAATCA TATCAACCTG GTAAAGAATT TGGATTTTAT 60
TTTGAGTGTG TTAGTGAGTA TTGCATGGCT TTGAGCAGAG AAAGGATGAT TTATATGTTT 120
AAAAGAGTGC TTTGCTCTT ATATGTGGAA GAGATTGTAG GAGGAGGACT CGAG 174

(2) INFORMATION FOR SEQ ID NO:1464:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 122 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1464:

GAATTCGGCC AAAGAGGCCT AGTTGCGGTT TAAATTTCCA AATGTATGGC ATTGCTTGT 60
TTTTTAAGTT GATTTCTAGT TTTATCACAT TGTGGTCAGA GAATGCTGAG AAAGAGCTCG 120
AG 122

(2) INFORMATION FOR SEQ ID NO:1465:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 315 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1465:

GAATTCGGCC AAAGAGGCCT ACTTGAGCTT TTTTCATGTG TATATATTTA TGCTTCTTTT 60
CTAAAAAATA TTGAGATGGA AATTCACATA ACAGAATTAA CTAAAGCATA CATTTCATTG 120
GTATTTACTA CATTACAAT GTTGTGCAAT CATTACCTCT CTCCAGITCT AAACATTTCA 180
TCACCCCAAA AGGAACCCCT AAGCGGTCAC TCCCCACTCC ACTGTCTCCC ACAGCCCCCTG 240
GCAACCAGCA GTCTGCTTTG TGTCTCAATG GATTACCTA CTCTTGATAG CTCTACAAAT 300
GGAACAATAC TCGAG 315

(2) INFORMATION FOR SEQ ID NO:1466:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 175 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1466:

GAATTCGGCC AAAGAGGCCT AGGTAAGAGA AACGACCAAT TCTACCAATT ATTCTACAAT	60
GTGGGTTTTC ACTGCTCTGT TCACATGCCT TATTCACTACT TCTTGTGGTG GTCAATTGCT	120
AGATGGTCTG TTGGAATTAT CTGCTGTCAT ACATCCAAAA AGGTCTCACA GAGAG	175

(2) INFORMATION FOR SEQ ID NO:1467:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 350 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1467:

GAATTCGGCC AAAGAGGCCT AGAAGGACAC CTCCATCCAT TCCACGCAGT TGCTCAAAGC	60
AGAAATTTTC AGTGCAAGTC TTGATGCTGC GCCGTCCCCC ACTCCCTACA TCAGAACGCA	120
TCCCTCATCT GGACTCCAGC GGTGGCTTCT TGATGCTGCG CGGTCCCCCA CTCCCTACAT	180
CAGAATGCAT CCCGCATCCA GACTCCAGCG GTGGTGCTCT ACCTGCACGC TGTGCCCAAG	240
TCCAAGCTAC CATACTCCTG CCTGAGCTAT GACAACAGCC TCCTCACTGA TCTCCCCTTT	300
CTTCCCTTTG CCTCCTCCAG CTCATTTTTC ACAGTGTAGA ATGACTCGAG	350

(2) INFORMATION FOR SEQ ID NO:1468:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 419 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1468:

GAATTCGGCC AAAGAGGCCT ACTATACTAA AATTCTGTGC AAAAAGATGC TTGAAATTAT	60
TGTAGAGACT GAATCTTTGC TGCTTGTTAT AAATATTGCA GGGCATAAAC CTTCACATTCA	120
TAGGTTTCATC AGCTTTTATG ATTGGGAGTG ACAGGGAGGC AGCATTGCAG TCCTTAGTCC	180
TAGGTGTGGT CTAGAATTTA CCCTGTATTT AAGTCACTTT GGAATAGAAG TTTTITTTCT	240
CGGACAGGAT ACACTATATA TTTTAAATC TCCTCCCATG GTCGTAGTGC AGAGATATAA	300
ATAGAAGTAC AGGTAAGAGA TGTCTTCTGC CTTTCAAACC CTTCTTAAGT TTGTGTGCTG	360
CTTTAACTTT ATTACATAG AGCAGTCTGT TTTATTACTC AGGATATGGG CCACTCGAG	419

(2) INFORMATION FOR SEQ ID NO:1469:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 612 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1469:

```

GAATTCGGCC AAAGAGCGAT GGGGACAAAG GCGCAAGTCG AGAGGAAACT GTTGTGCCTC   60
TTCATATTGG CGATCCTGTT GTGCTCCCTG GCATTGGGCA GTGTTACAGT GCÂCTCTTCT   120
GAACCTGAAG TCAGAATTCC TGAGAATAAT CCTGTGAAGT TGTCTGTGTC CTACTCGGGC   180
TTTTCTTCTC CCCGTGTGGA GTGGAAGTTT GACCAAGGAG ACACCACCAG ACTCGTTTGC   240
TATAATAACA AGATCACAGC TTCCTATGAG GACCGGGTGA CCTTCTTGCC AACTGGTATC   300
ACCTTCAAGT CCGTGACACG GGAAGACACT GGGACATACA CTTGTATGGT CTCTGAGGAA   360
GGCGGCAACA GCTATGGGGA GGTCAAGGTC AAGCTCATCG TGCTTGTGCC TCCATCCAAG   420
CCTACAGTTA ACATCCCCTC CTCTGCCACC ATTGGGAACC GGGCAGTGCT GACATGCTCA   480
GAACAAGATG GTTCCCCACC TTCTGAATAC ACCTGGTTCA AAGATGGGAT AGTGATGCCT   540
ACGAATCCCA AAAGCACCCG TGCCTTCAGC AACTCTTCCT ATGTCCTGAA TCCCACAACA   600
GGCGCACTCG AG                                     612

```

(2) INFORMATION FOR SEQ ID NO:1470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1470:

```

GAAAAGCCAA GACTTAACT TTCATTACAT ATCTAATAGT TGATATCACC AGTTACCATT   60
TTGAATTTTG TATAGTACTA GGTTAGAACA TTGCTTAATC CTTTTAAAAA AAATGCATTT   120
ACGTAGAACT CGAGCAGGAT GTTGGCCCCC GATGTTTTTT CTTCATACTC TTCTGTGCGC   180
TCCTCCCAT TCTGCACAGT TCTACCCAC TACTCTCGAG                                     220

```

(2) INFORMATION FOR SEQ ID NO:1471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1471:

```

GAATTCGGCC AAAGAGGCCT AGGGCATCAT GCAGACACAT CTGTTAAAGC AGGAAAAAAA   60
AAACCATGTG GAAGATTAAG CTAGGCAGAG TGCCTGAAAA GCCCTCTGCA ATAAGTTGAG   120
CTGGAAAAAC CTCCATATCT AAAGATGCTT TAATCATCTC AAGAACACCA ACAACATTTT   180
CTATTATAAT ATAACATGA TAGATGTGAA TCTACCTCTT GGATTAAGGC AATAATTTTA   240
TAGCTATCAA ATTTTCACAG ACACCATTTT CACTACTCTG AGTTGCATCT CTAACAAGCT   300
TCTTTAGCCT CTGCCTACAG ATTTCAGTGA CAAAGCCATT CAGCTCGAG                                     349

```

(2) INFORMATION FOR SEQ ID NO:1472:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1472:

GAATTCGGCC	AAAGAGGCCT	ACAACAAACC	ATTCTTCAGC	ACCTTTGCAA	AAACATCTAT	60
GTTTGTTTTG	TACCTTTTGG	GCTTTATTAT	TTGGAAGCCA	TGGAGACAAC	AGTGTACAAG	120
AGGACTTCGC	GGAAAGCATG	CTGCTTTT	TGCAGATGCT	GAAGGTACT	TTGCTGCTTG	180
CACAACAGAT	ACAACATGA	ATAGTTCTTT	GAGTGAACCT	CTGTATGTGC	CTGTGAAATT	240
CCATGATCTT	CCAAGTGAAA	AACCTGAGAG	CACAAACATT	GATACTGAAA	AAACCCCGC	300
GGTACTCGAG						310

(2) INFORMATION FOR SEQ ID NO:1473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1473:

GAATTCGGCC	TTCATGGCCT	ACAACTTTAA	GATTAGCTAC	TTTGAATAAT	CTCAGTAGGT	60
TCTGGGGCAC	AGGAGCTGCC	CCTCTTGGTC	TGAGATTGG	CCATGGGGTG	ATTAGGACAG	120
GTATAGTGGC	ACAGAGTGTA	AAAACCCCAT	AATGGTGTGG	ATTCTGGATT	GCTTAGTTTG	180
CATTTGACAA	GTGCATGCCT	GGGAGGAGGA	CTCCTTTAG	TAAAGAGGAT	GGGAGGCAAG	240
AAGAGAGGCC	AGAGGCCAAG	ACAAGGTAAC	TTAGGCATAG	CATCAGGTTG	TCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:1474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1474:

GAATTCGGCC	TTCATGGCCT	AAAAAAGTAT	GCAACACTCA	GTTTATTTAA	TACTTACAAG	60
GGGAAATCAT	TAGAAACACA	GAAAACCACA	GTTGCAGCTC	GACATGGATT	ACAGAGTCTT	120
GGAAAAGTCG	GTATTTACAG	GCGTATGCCT	CCACCTGCTA	ACCTCCCAAG	TCTTAAAGCA	180
GAAAACAAAG	GCAATGATCC	TAATGTAAAC	ATTGTACCTA	AAGATGGCAC	AGGGTGGGCA	240
TCAAAACAAG	AGTAACATGA	AGAAGAAAAA	ACACCAGAAG	TGCCACCAGC	ACAGCCAAAA	300
CCTGGGGTTG	CAGCTCCCCC	AGAAGTAGCA	CCTGCTCCCA	AATCATGGGC	CAGTAACAAG	360
CAAGGTGGGC	AAGGAGATGG	AATCCAAGTG	AATAGTCAGT	TTCAGCAAGA	ATTTCCAGC	420
CTGCAGGCAG	CTGGGGATCA	GGAAAAAAA	GAAAAGGAAA	CAAATGATGA	CAACTATGGA	480
CCTGGACCCA	GTTTACGTCC	ACCACTCGAG				510

(2) INFORMATION FOR SEQ ID NO:1475:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1475:

GAATTCGGCC	TTCATGGCCT	AATCCATTCA	TTTGATGGAC	ATTTTCTAAG	TACCTGTGAG	60
CCAGGTGCTG	CCATTTCAAA	GTCTCTTCTT	ACCACGCTCC	TCAGTGGCTA	GACATTTTCA	120
CGTGCCGAGA	AAGTCCCGAC	TCTTGCTGGG	CGTCCCTGGA	CAAGTTGCCT	TCCTCCTCTG	180
AGCTTGGCGC	TCCCCATCTG	TATAGTGGAG	ACCCTTGGCC	CCCCCTCTGT	CGGAAGGGCC	240
GATGCGAAGC	TGCAGTTAAA	AAAGGCTCAC	ATGCTCCTAG	CCTTGTGCAG	TCAGGAGGGG	300
AGACCAGGAC	AGTTGGAAAT	TATGATTGCA	AATGGCTTTG	CATTTTAGAT	CATTCGTGTG	360
TGTGGATCAG	AGAAACGCAC	AAGTTCCTG	GCATCTCGAG			400

(2) INFORMATION FOR SEQ ID NO:1476:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1476:

GAATTCGGCC	TTCATGGCCT	ACCACATTTT	GTCAGCAGAG	AGCCTTTTAA	ACTTGGATTG	60
CAACTTCCTG	TTGTCTAAAC	GGAACCCCTC	GAACGTAGGA	CTTATAGGGG	AAGCTGCTGT	120
GCATGTCAAA	AAACTACTA	ATCAGAAATGA	GCTTTGTCAT	CCAGAGCCAG	AACTGCTGCA	180
GAAATTTTTA	TAATTTTGCA	ACTTCTTTTT	TTACAAGGAA	CTTTTGTGCT	ACTACACATC	240
AGGACTTTTG	AAGCATCCAA	TAAATCCATT	TAATAAGTAT	GAGCATGTGT	CTGAGTGGAC	300
AAGAAAGTGA	AACCATCCAT	GCTACATTGG	ATAATTTTTC	CTCCCCCAGA	CTGGACAGGG	360
AATCTCAGCT	TTCAAAACAG	AGTAACCTGG	CTCCACTTAC	AAAGCTGCAC	AGGCATTAAA	420
GATCGTGTG	CCTTTGTTAG	GCAGATTTGG	AGGGGAGAGC	TCGAG		465

(2) INFORMATION FOR SEQ ID NO:1477:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1477:

GAATTCGGCC	AAAGAGGCCT	ACATGTAGCT	ATCCTAAGAC	GTATTTTATT	TTGAGCCACT	60
TTCTCAGAGG	GAATTGGGTG	GGTGTGGTCG	TAAGAACACC	TAGAAAATAG	GGGTGAAACC	120
TTTATGGGGC	CAGGGGAGCC	ATGGCAGAGG	GTGGAGTGGG	GGATAGAAGC	CTTCAGACTC	180
CTCCGCCCCA	GCCACTCTGC	ACCTGGGGCC	TTTCAGCTGT	TAAAATGAAA	AGCCAATTAT	240
CTTCTGTAAA	TGAGGGAAAA	AAAGAAGGAA	TAAAAGTGTC	TATTATGTAT	GCTGATATGC	300
ATAACACTTC	AAATAAAAGG	ATATATAAGC	ACTTGACAAA	TTGAGGGAGA	AGGAGGGGAG	360
AGTGCTGGGC	GCTCGAG					377

(2) INFORMATION FOR SEQ ID NO:1478:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1478:

GAATTCGGCC AAAGAGGCCT AGAGATTCAG TTTATTCTAT ACTCAGACTT TGGTATCCCC	60
TTAGATGCCC ATGTCAAAAA TGAGAAAGTT GGTGACATGG TATGGCATT TATTGCTTTT	120
TGTTTGTTTT CCATTGCTAC TTCTACTCAA ATTCCAAGGA AATCACAGAA GAAGGGCTTT	180
TGGTGACCTA AAAGTAGAAA TGAAAGCAAC AAAATGCATT CTGTCCAGCA GTACACTGAA	240
GACAAAAAAT GTAGTTGAAA AGTCTCAGGG AGCGCTCGAG	280

(2) INFORMATION FOR SEQ ID NO:1479:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1479:

GAATTCGGCC AAAGAGGCCT AATTGCTTT GCCCAGTAGT TGGAAAGTGA ACTCGACTCG	60
TGATGGTTCT CCTGTCATT TGGTTGATAG CAGCCGCTCT GGTAGAGGTT AGGACTTCAG	120
CTGATGGACA AGCTGGTAAT GAAGAAATGG TGCAAATAGA TTTACCAATA AAGAGATATA	180
GAGAGTATGA GCTGGTGACT CCAGTCAGCA CAAATCTAGA AGGACGCTAT CTCTCCATA	240
CTCTTTCTGC GAGTCACAAA AAGAGGTCAG CGAGGGACGT GTCTTCCAAC CCTGAGCAGT	300
TGTTCTTTAA CATCACGGCA TTTGGAAAAG ATTTTCATCT GCGACTAAAG CCCAACACTC	360
AACTAGTAGC TCCTGGGGCT GTTGTGGAGT GGCATGAGAC ATCTCTGGTG CCTGGGAATA	420
TAACCGATCC CATTACAAC CATCAACCAG GAAGTGCTAC GTATAGAATC CGGAAAACAG	480
AGCCACTCGA G	491

(2) INFORMATION FOR SEQ ID NO:1480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1480:

GAATTCGGCC AAAGAGGCCT AATTCATTCA GTCGTCATGA GTTGAGTGCT TACTACATGC	60
AAGGCACTCT GCTAGTTATA TTCTAATAAT GCAGAGATAA TTAGACATGG TTCCCGCCCT	120
CAAGAAGCTC ACAAAGTAT TCAGGAAATA ATGCAGACTA GTGATTTTGC TATAAAATTA	180
TTTTTGAAGG AAGCAGACAC AGCAGTATT ACCTGTAGGT GGAGCAAGTA ATAAGCCATG	240
CTGTGCAATA TATACATAAA GCTTCTGCTT CTCATGGGAA TTTAGTTACA GTGCTTGGA	300
TGAGAAAGGG AAGGAAAGAA TTAACAAATG CCAAGATTTC TGGAGCAGAT TGTACAGCTG	360
TGACTTTGGA AAACAGAAAG TAAGACCTC AGAAAACCAA TGAAGTCTAA GAGAAATAAA	420
ATTTAGTGGA CAGGTATGAA AAGTGAATT GCGCCTAACT ACCAGATGGA GACCTTCAGA	480
ATGGGCTATC CTTAGAGTCT AGTACATCAA GAGACCCCTC GAG	523

(2) INFORMATION FOR SEQ ID NO:1481:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1481:

```
GAATTCGGCC AAAGAGGCCT AAAAAAAAAA AAAAAAGAAG ATATAAGCTA CTAGTATCAA    60
AAATGAAAGA GGGGCTGTTT CTAATGATCC TGCAGACACT CGAG                      104
```

(2) INFORMATION FOR SEQ ID NO:1482:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 337 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1482:

```
GAATTCGGCC AAAGAGGCCT AAAGTGAAGT AAGAGATGCA CCTGAGAAAA CCTTGGCCTTG    60
CATGGGTTTG GCAATACATC AGGTGTTAAC TAAGGACCTT GAAAGGCATG CAGCTGAGTT    120
ACAAGCCCAG GAAGGATTGT CTAATGATGG AGAAACAATG GTAAATGTGC CACATATTCA    180
TGCAAGGTGA GGAATTTGAT GTATTAAAGT ATTACTTAGA ATGGGACATT GAAGGCCATT    240
TAAGAATGAA NACGCTCATT TTATAAAAAT GAGGAAATCA GTAAAAAGGA CATGAGTTCC    300
TTGCCATCTC ATTGATCATC AACTGAACA ACTCGAG                                337
```

(2) INFORMATION FOR SEQ ID NO:1483:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 168 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1483:

```
CGATTGAATT CTAGACCTGC CTCGAGAGCG CGCTGTTGAA TACCCAGTAT GATGGTCCTT    60
AGCCTTCTTA GACCTTTCCT GTACCACTAC CTCTATGCCT TTTGCCAAGT CCAAGTGTTT    120
ACCAGAAATG GAACTGATGC CAGAAAGACT ACAGCAACAA TACTCGAG                    168
```

(2) INFORMATION FOR SEQ ID NO:1484:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 478 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1484:

```
GAATTCGGCC AAAGAGGCCT AGCAACCGCG CCTGGCTGCC TTTTCATTTT TAAAAACGTC    60
```

```

AGTGTGCGTC CCACACAACA TGCAAACCTT CCTGCCGAGC TCGGACCTTC GCCTGTCACG      120
GAACCTGGTG CTGAGTGTGG TGAGAGTGAA TCCTGCAGCA CGTGGCGCAC TGTCGGCCTC      180
TTTCATGTTT AGCTTTTGAT TGTGCTTATT GTCCATTTGT ATTTCTTCTT CTAAGTGTCT      240
GTTCAAGACT TTTCCGTCTT GGCTGGAGGT GGGAGGTGCC TGCTCCTGTG TTTTCTGGCA      300
TCTTTCTCTG CTGTCTTTGT GTGTCTGCAC TCAGGGAGTT TCCCTGGGGT GTGTGCCTAG      360
AGAGGTGCTG GTTGACATT TCAACGTAGG GACAGATTCC CAGCGTGTCT TTAAAGGAGC      420
TGTGCCGCTG TGTGCTCACT TGAATCGCCG GCGTTCTTGT TTCTCCAGGC CTCTCGAG      478

```

(2) INFORMATION FOR SEQ ID NO:1485:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 307 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1485:

```

GAATTCGGCC AAAGAGGCCT ACACACTGCA AGAACAGAGC CAAGAACCTA CCATGTACCC      60
TTTACTTGGA TTTATCATT CTGTTTGTGA CATTGCTTTT ATCATTCTTG TTATATTTAC      120
ATATAGTTCC TTCCCCTTGG ATTATTTGAG AACAACTGC AGAACTCACA CCTCTTTCCC      180
CGAAGAACTA GGCATTAGCA CATTACAAGA ATACGATGAT AGAGATCAGA AGTTAAATGC      240
TGATGAGATA TTCCTGTCTA ATCCACGAAC CTTATTTCAT TGTCAATCAGT TGTCCTCAAC      300
GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1486:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 579 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1486:

```

GAATTCGGCC AAAGATTGCT GTCCTTCAAC GTGTTTCTTA TGAAGTTATT AGTAATACTT      60
TTGTTTTCTG GACTTATAAC TGGTTTTAGA AGTGACTCTT CCTCTAGTTT GCCACCTAAG      120
TTACTACTAG TATCCTTTGA TGGCTTCAGA GCTGATTATC TGAAGAACTA TGAATTCCTT      180
CATCTCCAGA ATTTTATCAA AGAAGGTGTT TTGGTAGAGC ATGTTAAAAA TGTTTTTATC      240
ACAAAAACAT TTCCAAACCA CTACAGTATT GTGACAGGCT TGTATGAAGA AAGCCATGGC      300
ATTGTGGCTA ATTCCATGTA TGATGCAGTC ACAAAGAAAC ACTTTTCTGA CTCTAATGAC      360
AAGGATCCTT TTTGGTGGAA TGAGGCAGTA CCTATTTGGG TGACCAATCA GCTTCAGGAA      420
AACAGATCAA GTGCTGCTGC TATGTGGCCT GGTACTGATG TACCCATTCA GGATACCATC      480
TCTTCCTATT TTATGAATTA CAACTCCTCA GTGTCATTTG AGGAAAGACT AAATAATATT      540
ACTATGTGGC TAAACAATTC GAACCCACCA GTCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1487:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 352 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1487:

```

GAATTCGGCC AAAGAGGCCT AGATTGAATT CTAGACCTGC CTCGAGAGTC ACGCTTAGTT      60
TGCCATTGTG CCAGCTAGTG ATATTGCTGA TGTTTTTTGT GGGTGTTCCT TTAGCAAAAC      120
GTGAATGAAT GCATGTTTAC AGGGATGCTC TGGACTGGAG GATGGTGAAA TCCATCGTGG      180
TTGTCCTCTC CCCTGAATGT CCTTTTGTAG CCAGGGCATC TTCCAATAT GAATTATTAA      240
GCCTTAACTT ACATTTTTCG ATAACTTATA ACTCTCCATT ATATATTGG TTACATTCTC      300
TAGATGTTTT CAACATTCTT TATTAAAGTT ATTTTATCAG CATCCGCTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:1488:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1488:

```

GAATTCGGCC AAAGAGGCCT ACAAATGGGC AGAAGTGAAA CAGTCTTGTC AGATACCTGT      60
TTTTTAAAAC TCCATTTTAG AAAAGGAATT AACTAGGACT TTATATCTCT TCGTTCAATA      120
TAATTTTAAA GAAGAATTGT TGAAAAGTAG ATATGTTTTC CCATTGCTG AGAATATTTT      180
GTACGTTAGC TTGTCTCTTA CAAAACTAA ATGTGTTTCT ACTTCTGATA ATGTATGTCA      240
ATTTAAATTT TGAATGGCC AAGATAAGTT GCTCTGCATC TGTCCTTCAT ATGGCTCCTG      300
AGCACAGCTC AGTGACTGGC CTTGCAGTG CTTCTACCGT TGTAATGGGT AAAACCAGGG      360
GAAACTGCCT TGCTCTTGAG CTTGAGCAGG TTAATCAAAA GGATAGAGCT TCCACTCTCG      420
AG                                  422

```

(2) INFORMATION FOR SEQ ID NO:1489:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1489:

```

GAATTCGGCC AAAGAGGCCT AGAGAAAGAG AGAAAGAAAG GAGGGAAGGA AAGGAAGGAA      60
GGAAGGAAAG AAGGAAAGAA GGAAGAGAG GAGACTGAAG GGCCAAGGAG GGCATACAAT      120
GGAAGATGAG AGCTGTGCTC CCGGGAGGCT TGTACTCATC AAGAAAGAAA GGAGAAAGAG      180
GGGGAAGAAA AGAAAAAAA AGAATAAAGA AAGGAGAGAT GAAGGAATAA AGGAAAAAAA      240
GTAGAAAGGA AAGAAGGAGA AGGGAGAGAA GAAAGTAGGA AGGAGAAGTC GAG              293

```

(2) INFORMATION FOR SEQ ID NO:1490:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1490:

```

GAATTCGGCC AAAGAGGCCT AGTGCAACTA CAGATAAGTA AACTTCGACT GGGTTTAGTA      60
ACACCTGTCT TTAATATTGG TCAGTGTACC TACATTGATA ACATTGACCT TTGGAATAAT      120
TGGACTTGTA TTGTGTTATT TCTCTAGCAT ATTAGTCCTA AAAAAGTGTG AGTAATAGGA      180
GATGGAGAGG TGTTTGTTGA TTGTCATTCT GTGGTTCCTA CAGCATTCAA GTTGCCTCCG      240
TACGCTCGAG                                     250

```

(2) INFORMATION FOR SEQ ID NO:1491:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 435 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1491:

```

GAATTCGGCC TTCATGGCCT AATTCTTAGA AATAAAGCCA CTATCATGCA GGTATTTTAC      60
AAGTAAAAAC ATGGAGTCAG CCCAGTAGAG AAACGTTCAA ATAGTGTGGC TCCTGCTCTG      120
CCACGTTCTG TTTATGACTT TGGATATTTT ATTTATCCTT TCTGGGGTAG TTTTCAACT      180
TTAAGGTCCT AATAAACTTT TAGATTTTAT GACCTGTCCT CTTTAGCCCT GTAAGATTTA      240
AATATTATAA AGAACCTGAT TTCAAAGACA CTGGTAAACT TGGACAACCT AACAAAGTCCA      300
AGTATGGTAC TTATTTGTGT GTGTGCATAT ATTAACCTTA TGCATATGCT GTTTTCACAC      360
CTATTTAAAC TGTTTTGGAA AAACGTATAT ATCAGTTTTT GGAAAACAGA AGAAGATTTT      420
AAACGGCTAC TCGAG                                     435

```

(2) INFORMATION FOR SEQ ID NO:1492:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 360 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1492:

```

GCGATTGAAT ACATGTTCAA TAAGGACAAT GGACAGGCAC CTTTACCAT CACTCCTGTG      60
TTTTCAGATT TTCCAGTCCA TGGGATGGAG CCCATGAACA ATGCCACCA AGGCTGTGAC      120
GAGTCTGTGG ATGAGGTCAC AGCACCATGT AGCTGCCAAG ACTGCTCTAT TGTCTGTGGC      180
CCCAAGCCCC AGCCCCCACC TCCTCCTGCT CCCTGGACGA TCCTTGGCTT GGACGCCATG      240
TATGTCATCA TGTGGATCAC CTACATGGCG TTTTGTCTTG TGTTTTTGG AGCATTTTTT      300
GCAGTGTGGT GCTACAGAAA ACGGTATTTT GTCTCCGAGT AACTCCCAT CGATCTCGAG      360

```

(2) INFORMATION FOR SEQ ID NO:1493:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 271 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1493:

```

GAATTCGGCC TTCATGGCCT AAGCAGACAA TATAGTAGTA ATTTAAATTT TGTTTCCTG      60
ACTTTCTGTA GTCCCTAAAC AAACAACAAA AAATCCTAGT AATCTTAAAC TTTTACATTA      120
ATAGAGATCC AAGAGAAAAT AAGCCATTTT TCACCATTGT GGACCCAAAT AAATCATAGA      180
CATGGTATTA AGAAGCCCTT TTCAGTCTGG TTGCAGTATT ATTTTCCTAC CTTTCTTTT      240
CCTGTTCCCT GCTGTATGCC CACAGCTCGA G                                271

```

(2) INFORMATION FOR SEQ ID NO:1494:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 310 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1494:

```

GAATTCGGCC TTCATGGCCT AATGGGTCAG AAATTGGGC CTGGCTAAGT GGATCCTCCA      60
CCCCAGGGTC TCTACAAGG CTGCAATCAA AGGGCTGACT AGGACTTGGA ATCTCATTG      120
AAAGTTAGAT TGGGGAAGGA TCTGCTTCCA AGCTCACTCA GTAGTTACTG GCAGGATTAG      180
GTTTCTCCAA GGTGCTTGA CTAAGGGTCT CAGTTCCTCA CTGACAGTTG GCCTGAGGCT      240
GCCTTCAGTT TCTTGCCATG TGGGCTCCC CAGCATAACT GTTTACTTCA TCAAACAAA      300
CAAACTCGAG                                310

```

(2) INFORMATION FOR SEQ ID NO:1495:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 138 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1495:

```

GAATTCGGCC AAAGAGGCCT ACGTCGATTG AATTCTAGAC CTGCCTCAGC TCTAATTATG      60
GTTTCATGTTA GATTGTCTGC CCTTCCTCTT CCTCTTCTT TTTGGGGAAA GATAATAGCA      120
CTTAATAACG CCCTCGAG                                138

```

(2) INFORMATION FOR SEQ ID NO:1496:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 102 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1496:

```

GAATTCGGCC AAAGAGGCCT ACAAATGTG TCCTTTTACG TACGACAGAC TTCTGAAATG      60
GTAGTAGTAG TAGTGCCCTT TTTTCTCTC TTTTGTAGCC AG                                102

```

(2) INFORMATION FOR SEQ ID NO:1497:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1497:

```

GAATTCGGCC AAAGAGGCCT ATTTGTTTCT TTGTACTGCC TAACTTTAGA AAGACCTGNA      60
ANCGGTANCA TGAAACATT TTTAGAGAGA ATTACCAGGC ATTTTGGTA GAATGAGTGT      120
TTAATGGAAC AGTCCAGAGA ACTCATCAA GATGTTTATT AAAACGCGCA GACCTGCTCC      180
AATTAAGGGC CCAAGTCAGTG GTGTTAACAG TGAAGGGACT GTTCCAGAGG CGTGCTGCAC      240
GGGACGCCCC CCCCAAATAC AAATGGTTTG CCAGTAGCTC ACAAATGAAC CCCATTGCCT      300
TGCACTTAAG CTTCTGAAG CACATACATA TCCTGCTTTG TGCTTCCGC CCTATAGTAA      360
ACGCAAACCA ATGGAGATGT GAAGCAATCT AATAGCAACA AGGCAAACCT CTAATTCCTC      420
TAAAGAGGAT TGCATCCTCT TGCTATCTT GCCGATGCTC TCCTACAGAC CCATCCGCTC      480
GAG

```

(2) INFORMATION FOR SEQ ID NO:1498:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1498:

```

GAATTCGGCC AAAGAGGCCT AAAATTTCAA TAGGCTATAG AGTTTCCAT GAGAGTGTGT      60
GTGTGTGTGT GTGTGTGTGT GTGTAAAGAA CTCTTACATT TCAGTGAGAA AATATTTTCA      120
TTGAAAGGAA ACACAGAACT CGAG

```

(2) INFORMATION FOR SEQ ID NO:1499:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1499:

```

GAATTCGGCC AAAGAGGCCT AAAATAACTG TCCAATTAAC TGAACACTGA GGTAGCTGGG      60
TACAGACTTT AGCGGCTACA TTTGACAAAC ATTGCAATTA CAAGCAGCAA CACAAACCAA      120
CCTTGGGATG GGGATAGAAA TCTTTTCNTT CTTTNTTCTT GGGGGTTGA GACAGAGTCT      180
CGCTCTGTCA CCCAGGCCGG AGTGCAAGTG CGCAATCTCC GCTCACTGCA AACTCCACCT      240
CCTGGGTTCA AGTGATCCTC CTGCCTCAGC CTCCCAAGTA GCTTGGATTA TGGGTGCCCC      300
CCACCATGCC TGGCTAATT TGTATGTTT GATAGAAACG GTGTTTCACC CTGTTGACCA      360
GGCTGGCCTT GAGCTCCTGA CTTCAAGTGA TCCACCTGCC TCAGCCCCC GACTCGAG      418

```

(2) INFORMATION FOR SEQ ID NO:1500:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1500:

GAATTCGGCC AAAGAGGCCT ACAAAGACCA AGGTATCACA TTCTGCCATT AGCTGCTACC	60
TCTCCCTTCC CCATTTTCAG ACAGATTGAG CCCACTTTTT GTGTCCTCCT CTGCTCTTAA	120
GCTGTTTCTC ATCGTGGGTG CTCAGCAACT TGTCTGCTCT CACTCTAGTT TCTATTTGCT	180
TCCCTGAAAT TAGCCTTTAA CTATGCCAG ACAAGCCAGA GCCTTGCCTA AACTTCTAAT	240
TCCTCTGTGC TTCTTAGTGT ATCCTTTCTG CCTGCTTGCC TGCCTGCCTT CCTGCCTGCT	300
TGCTGCCTT ACTGACCCTT TGCCCCACGC TCTCGAG	337

(2) INFORMATION FOR SEQ ID NO:1501:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 105 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1501:

GAATTCGGCC AAAGAGGCCT AAACCGTCGA TTGAATTCTA GACCAGCCTC ATCTCCTGTT	60
CCTCTCTCCC TCCCAACTAT GTTGGCCTCC CTGCTGCTCC TCGAG	105

(2) INFORMATION FOR SEQ ID NO:1502:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 701 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1502:

GAATTCGGCC AAAGAGGCCT ACTGTGAACC TAAACTCCT ATAAAGAAAA GTAAAGTCTT	60
AAAAACAAAC AAATACACAG CAACAATCTT ATTTCCCCA GCCTGTCTTA TGTTAGGGTG	120
CAGATGTGAT TTCTGTGTGG CTAATCAGAT GCCCTTGTGT GAGAGACTGA TTTGAACAGA	180
GGCAGGGGCA TCCATCTTTC TAGTGTCACT CACAGCAGAA GCAGTGAGGT CCTGGTGTCT	240
GTCGCTGCAG TGGTGGCTTT TGATACAGGA GTTCCCTGAT GGCAGTAGCT TCTTTGTGGG	300
TTCAGTTCTG TTGTGTGGTT CTGCAAGTTC AGCTTAGAGT CTGTTCTTTC AGCTGTTTCA	360
ATGACCCTCT GAGCTGTCTA CCATGAAAAA TTCTATCCTG CTTACACTAA TTAGAGCCAA	420
TCCTGTTATT TACAAATGAA TATCCTGACC AGTAATGAAG GTCTAGACTT AACTGTAATA	480
TTTTATGACT TAAATGTTG GCATATGTGA AAACCTTTTG TTTATTCTAA ACTTTTTTGT	540
TGTTGTTGTA AAATAAAACA TTTATGAAAA GCQCACCAA AAGGATAACA AATGAGAGTA	600
ATGCAACATA CAGGCACCAG CAACTCAGGC CAGGGAGATG ATATATGAGC ATCCCCAATC	660
TCCCTTTTAC ACTCCCTCAA ATAACCAAT CAAGACTCGA G	701

(2) INFORMATION FOR SEQ ID NO:1503:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 257 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1503:

GAATTCGGCC TTCATGGCCT AGGAACTAGG TGACTTTGGG GCTCATCTCA CAAGTTTCCT	60
TACACTTAGG GATCAGTCTT TTGCTTCCTG TTGTCCTCTG CCTGAAAGTA GTTGCCAAGT	120
TGTACTGTTT TATATATCCA CCACAGCATG AGTTAAACCA AAGTCTGGAT CAGCAGACTG	180
CCAGATTTTT TTTTAACAA TTTATTAATC AATACATTTT GTCCATGTCT ACAGTTGTTT	240
ATGGGGGAGA ACTCGAG	257

(2) INFORMATION FOR SEQ ID NO:1504:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 277 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1504:

GAATTCGGCC TTCATGGCCT AGGGGACCTT GGGAGAATGT AATCCCTGCC CCTAGTCTCA	60
GTTTCTGCAT CCACGGAAGA GGGGTGAAGA TGGTCCCTAC CCCTCCAGAA TGTCTTTTTT	120
TTTTTTTTTT AAAAAAAAAA AAAAAAAAAA AAAGTACGTT ATGTTTTCAG ATAAGAACAC	180
TTCTTCATGG ATGACTTGAA ATAATTGCCA TGGTCCCTAA GTTTTCCTCT CTGTAGATGA	240
ATGATATAGC TCAGTATCTA AGCAGTGGAT CCTCGAG	277

(2) INFORMATION FOR SEQ ID NO:1505:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 341 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1505:

GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAGCCTCCC AAGCTGCTGG TATTACAGGC	60
GTGAACCACT GCACCTGGCC TAATACGATA TTCTTACAAT TTAAAAATG AAAGCAGAGG	120
AATGGTGGCA GGGAAGCTGA CATTTTAAGA GTTCACTTCC TTGTAGTTAT CACAGTTAAT	180
TCTTACTGTT AGAATAAGTG GTAACCTGCC AAGGTCACAT TGCTAGATGT CAGAGCAGAA	240
ATTAGAAATC AGGTCTAGCC AAGGCCATCA CACTTCTCAG AGCATTAAAC ATTCAATTCA	300
GTTAGTGTTT ATTGAACACC TATTGTGTTC TGGCCCTCGA G	341

(2) INFORMATION FOR SEQ ID NO:1506:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 270 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1506:

GAATTCGGCC	TTCATGGCCT	AGGCATTTTG	TCTCTAGAAT	TACCCACCCG	TTCTGCGCT	60
CTACGGTTCT	CCATGCCCCC	TCCAGTTTGG	GGGTCTAAAC	CGAACAGGAG	AGGTGCAGGG	120
GACCAGGAGG	TGTCCTGGCA	CAAAGGTTTC	GGGTCTCCC	TGGCAAGGGG	TCCCAGGGCC	180
TGGAGCCCGA	GGCCAGCCA	AAAGCACACA	GCATCAAAAC	ATGTTTTTAT	TGGGAAGCTC	240
CAGGCCCTGC	CCCTCCCCGG	GGCCTCGAG				270

(2) INFORMATION FOR SEQ ID NO:1507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1507:

GAATTCGGCC	TTCATGGCCT	AGAGCAGGAA	GATTGTGTGA	GTGCTGGGGT	TTGGGGGTGC	60
CCAAGTTGGG	AACCAGTGGG	GGGAGAGAGA	GGTAGGAGGT	AGATGGATGG	AGATCAAAGG	120
CCAGGCCTGT	GGCCAAGGGG	GCTGCTAACC	CTTCAACCCT	GTGTTAGCCT	GTACACTCAC	180
CAGGCCAGGC	TCAGCAGGCG	GGCTGTTTAC	CTCCTGGCAG	CAAATGGTCC	AGAATGTGCC	240
CTCGCTGCAG	CCCAGCTGGC	TCCAGAAGGG	GGACCACAGA	GGCTGGAGCT	ATGCATGCAC	300
AGTGCTTTCT	CCCAACCTTG	CTTCTGAGAA	AAGTGTCCT	GCGAGGGCCC	TGGAGGAGGG	360
AGCTAGGGAC	CAGCAGAAGG	GCCTAGGTTT	CTGTAGCATC	ATTTTATGCC	CTGGCTGAAT	420
CTGGGAAGCA	CCTGGTGGCT	TTAACATTCC	CGTTAGCTCG	AG		462

(2) INFORMATION FOR SEQ ID NO:1508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 694 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1508:

GAATTCGGCC	TTCATGGCCT	AGTCACAATC	CACTTAAAGA	AGTTTGTTA	TATTTAGTGC	60
AAAATTTTCT	TCCAGAGTAG	GTTTTTTTC	GTGGGTGGG	GGGTAACTTT	ACTACAATTA	120
GTAAGTATGG	TGCAGAATTT	CATGCAAATG	AGGAGTGCCA	GCAGTGTGAT	AATTTAAACA	180
TATTTAAACA	AAAACAAAAA	AAATGAATGC	ACAAACTTGC	TGCTGCTTAG	ATCACTGCAG	240
CTTCTAGGAC	CCGGTTTCTT	TTACTGATTT	AAAAACAAAA	CAAAAAAAAA	TAAAAAAGTT	300
GTGCCTGAAA	TGAATCTTGT	TTTTTTTAT	AAGTAGCCGC	CTGGTTACTG	TGTCCTGTAA	360
AATACAGACA	CTTGACCCTT	GGTGTAGCTT	CTGTTCAACT	TTATATCACG	GGAATGGATG	420
GGTCTGATTT	CTTGGCCCTC	TTCTTGAATT	GGCCATATAC	AGGGTCCCTG	GCCAGTGGAC	480
TGAAGGCTTT	GTCTAAGATG	ACAAGGGTCA	GCTCAGGGGA	TGTGGGGGAG	GGCGGTTTTA	540
TCTTCCCCCT	TGTCGTTTGA	GGTTTGTATC	TCTGGGTAAA	GAGGCCGTTT	ATCTTTGTAA	600
ACACGAAACA	TTTTTGCTTT	CTCAAGTTT	CTGTTAATGG	CGAAAGAATG	GAAGCGAATA	660
AAGTTTACT	GATTTTGTAG	ACACTAGACT	CGAG			694

(2) INFORMATION FOR SEQ ID NO:1509:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1509:

```

GAATTCGGCC TTCATGGCCT AATGAGGTTC TATCTAGAGG TGATGGGAGA CAGTGACAGA      60
TCATCAGGCA TTAGATTCTC ATAAGGACTG CGCAACCTAG ATCCCTTGAA TGAACAGTTC      120
ACAATAGGGT TCACTCTCCA ATGAGAATCT AATGCTGCCG CTGATCTGAC AGGTGCCAGA      180
GCTCAGGCGG TAATACGAGA GGCTGGAGAT ACAGATAAAG CTTCAAGTTC TTGCCCCCCA      240
CTTACCTCCT CTTGTGCGGC CCAGTTCCTA ACAGGCCACA GACCGCTACC AGTCCATGGC      300
CTGGAAGTTG GGGACCCCTC TACTGGGATA TTTATAATTG CATATGTGGT TACCTAATAT      360
TTCCATGATA CAACACTGGT CTAGATTCTA GGCCATTCTC CTTCAAAAAG AACCTGCTT      420
CCTTACAGTT TTAGTGTTTA GCAGCAATGT TTTCTACCCC TTCTTAAAT TTTCAGCCAC      480
CACACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1510:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1510:

```

GAATTCGGCC TTCATGGCCT ACTCTCTCAT TCCTACCCTC CTCCTCCCA CTCACGCTCC      60
TCCCAATCCC CAAGGTCCTC TCATCCACAC CTTCTCCCTC TCCTCTCCTC ACCTCCTCC      120
CTATCCCCGA GTCCTCTCTC CATCCCTACC CTCCTCCCCT CCACTCACGC TCCTCCCAAT      180
CCCCAAGGTC CTCTCATTCC CACCTTCCTC CTTCTCTCTC CTCACGCTCC TCCCTATCCC      240
CGAGCTCCTC TCTCACTCCC TCCCTCCTCT CATGCTCCTC CCCCTCTCC TCATGCTCCT      300
CCCCATCCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:1511:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1511:

```

GCCGGGTGGG CCGGAGGTGG CGCGGCCGCA CGGCTTTGTT CCGGAAAGCC CTTAGGTGGA      60
GAGCGATGTG GGGCGCGGCA GGGGGATCGC GTAGAGGAAC CTTGCGGCAC CGCCTCTCCG      120
GGTCTGGGAA TCTGCTGAAC TCCTTGCTCT TCTTGGGGTC CCTCGAACGC CCCAGCTAAG      180
AAGGGCGGGG GCCTTGCCAG GGGCGGAGCA ACATGACGTT CAAGGTCTTC CTGTGGCTTC      240
TGTAAGAGAA TGTTACGTG GGAGCCTGTC CACATGGGCT GTAATAAGGA TCTGGCACGA      300
GGAAGAAATA TCACTGCAGA ACCTGAAGCC CTCCGTTGGA AGGTCACCT CGAG          354

```

(2) INFORMATION FOR SEQ ID NO:1512:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1512:

```

GAATTCGGCC AAAGAGGCCT AGAGCAGCTT GGCTAAAAGT AAGGGTGTCTG TGCTGATGGC      60
CCTGTGCGCA CTGACCCGCG CTCTGCGCTC TCTGAACCTG GCGCCCCCGA CCGTCGCCGC      120
CCCTGCCCCG AGTCTGTTCC CCGCCGCCCA GATGATGAAC AATGGCCTCC TCCAACAGCC      180
CTCTGCCTTG ATGTTGCTCC CCTGCCGCC AGTTCTTACT TCTGTGGCCC TTAATGCCAA      240
CTTTGTGTCC TGGAAGAGTC GTACCAAGTA CACCATTACA CCAGTGAAGA TGAGGAAGTC      300
TGGGGGCCGA GACCACACAG GTGGGAACAA GGACAGGGGG ATTTAAGCAG TCAAAAGGAA      360
AAACATGTTA AGACCTAGA CTTGTATATT GACACACAGA ACTCGAG                          407

```

(2) INFORMATION FOR SEQ ID NO:1513:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1513:

```

GAATTCGGCC AAAGAGGCCT ACATTCATAC AATTACAGAA TTCAAATATT GCAAAGGAT      60
GTGTGTCTTT CTCCCCGAGC TCCCCTGTTC CCCTTCATTG AAAACCACCA CGGTGCCATC      120
TCTTGTGTAT GCAGGGCTAT GCACCTGCAG GCACGTGTGT ATGCACTCCC CGCTTGTGTT      180
TACACAAGCT GTGGGGTGTT ACGCATGCCT GCTTTTTTCA CTTAATAATA CAGCTTGGAG      240
AGATTTTGTG ATCACATTAT AAATCCCACT CGCTCTTTT GATGGCCACA TAATAACTAC      300
TGCATAATAT GGATACGCCT TATTTGATT AACTAGTTCC CTAATGATGG ACTTTTAAGT      360
TGTTTCCTTT TTTTTCTTT TTTGCTACTG CAAACGATGC TATCTAGGCC TCTTGGCCG      420
AA                                                                                   422

```

(2) INFORMATION FOR SEQ ID NO:1514:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1514:

```

GAATTCGGCC AAAGAGGCCT ATGGAATTC AAGACCTGAT GTTTGAGGAG ATGAGGGAAA      60
CTCTTAAAAA TGACCTAAAA GCAGTTT TAG GAGGAAAAGC TACAATACCT GAGGTAAAGA      120
ATTCAGAGAA CTCCAGTAGT AGGACAGAGT TTCAGCAAAT AATCAATTTA GCATTACAAA      180
AAACAGGGAT GGTAGGGAAA ATAGAAGGAG AAAACTCTAA AATAGGTGAT GATAATGAAA      240
ATTTAACCTT TAAATTAGAA GTAAATGAGC TGAGTGGTAA ATTAGACAAC ACTAACGAAT      300
ACAAATAGTAA TGATGGTAAG AAATTACCCC AGGGTGAATC ACGAAGTTAC GAAGTCATGG      360
GAAGTATGGA AGAAACCTTA TGCAATATAG ATGACAGAGA TGGAAATCGC AATGTCCATT      420
TAGAATTTAC AGAAAGAGAG AGTAGGAAGG ATGGAGAGGA TGAATTGTCT AAAGAAAAAC      480

```

TCGAG

485

(2) INFORMATION FOR SEQ ID NO:1515:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1515:

GAATTCGGCC AAAGAGGCCT AGGCACAGAA GGGTGGTGAG TGTGATCAAA TCTAGTCTCA	60
CTCCCACTTT TTAGTCTCAC TCCTACTTTT GTCCACCACC CAGGCACGGA GAGAAAGGAA	120
TGTTTAGCAC AAGACACAGC GGAGCTCGGG ATTGGCTAAA CTCCCATAGT ATTTATGGTG	180
GCCGCCGGCG GGGGCCCCAG CCCAGCTTGC AGGCCACCTC TAGCTTTCTT CCTACCCCAT	240
TCCCGGCTTC CCTCCTCTC CCCTGCAGCC TGGTTAGGTG GATACCTGCC CTGACATGTG	300
AGGCAAGCTA AGGCCTGGAG GGTGAGATGG GAGACCAGGT CCCAAGGGAG CAAGACCTCG	360
CGAAGCGCAG CAGCCCCGGC CCTAGGCCTC TTTGGCCGAA	400

(2) INFORMATION FOR SEQ ID NO:1516:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 145 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1516:

GAATTCGCGG CCGCGTCGAC GTCGACGCGG CCGCGAATTC GGCCAAAGAG GCCTACCCAT	60
TGCAATCAAG ATGGGTGATT ATGAAATGCC AGACTTCTAA AATAAATGTT TTGGAATTCA	120
ATGGGTAAAT AAATGCTGGC TCGAG	145

(2) INFORMATION FOR SEQ ID NO:1517:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 277 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1517:

GCTGGACCTC CTGTGCAAGA ACATGAAACA GCTGTGGTTC TTCCTTCTCC TGGTGGCAGC	60
TCCCAGATCG GTTCTGTCCC AGGTGCAGCT GCGGGAGTCG GGCCAGGAC TGGTGAAGCC	120
TTCGGAGACC CTGTCCCTCA CCTGCACTGT CTCTGGTACT TCCGTCAGAA GTGTTAGTTA	180
CGACTGGAGT TGGCTCCGGC AGTCCCCGGG GAAGGGACTG GAGTGGCTTG GAGAGATTGA	240
TTACAGGGGG AGAGGCAATT ACAACCCGTC CCTCGAG	277

(2) INFORMATION FOR SEQ ID NO:1518:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 161 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1518:

GAATTCGGCC AAAGAGGCCT ACTCATGCAC CTAATTGGAT CCTATCTTTG TGTGTAGC	60
TGGTTATTAT GCAGACTTTA TTATGTGGTT GTTTTATAGT GTCCATAACC TATGTACTTA	120
AGTTTGTGTTT TGTGGTGGCG CTTCCAATTA GGGCTCTCGA G	161

(2) INFORMATION FOR SEQ ID NO:1519:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 561 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1519:

GAATTCGGCC TTCATGGCCT AATATAAAAC AATGTTTTTC AAGGCATTAT ATAATAGGCT	60
AAGGACAGTG ACCTCCAAGA GACAGCAAAC AAGGTAATAC CTGTGACTGC TCCAGCTTAC	120
TGCCTTGAGA GAATTAATAG TAGGTTTGTG GTACAGGGAG GGAGAATCCA GTCAGAGCCC	180
AGCGGACTTG CTGAATTAAG GAAATGGAGC TGAGAGTCCA GAGAGACCAA CATGGCTAAA	240
GTTGTCATGA CAGAGCACTC AGAACTAGAG AGCTGCACAG CAACATAACC TAAGAGCTCT	300
GAAGATAATC TCCCTCAAAT ACTCAGCTGA GTACTGATCA ACATATATGT GTGAGGAAGC	360
TATCTGAGGC TGACAAAGAA CTGCCTGAAG AGATTAGAGG GAACAGTACT TGGCACTCAC	420
ACAGAATTGG AAAGTGTACC TGTCCCAACC AGCCAACTG GAAAAACCTC AGGATTCATG	480
GGGTACTCAG AAAGGACTTG CATCAGGTAT GGGGAATAAT TAGCCCTAGA CAGAGCACTG	540
CTCTAATCCC ATCCACTCGA G	561

What is claimed is:

1. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

2. An isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ

ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172, SEQ ID NO:173, SEQ ID NO:174, SEQ ID NO:175, SEQ ID NO:176, SEQ ID NO:177, SEQ ID NO:178, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:182, SEQ ID NO:183, SEQ ID NO:184, SEQ ID NO:185, SEQ ID NO:186, SEQ ID NO:187, SEQ ID NO:188, SEQ ID NO:189, SEQ ID NO:190, SEQ ID NO:191, SEQ ID NO:192, SEQ ID NO:193, SEQ ID NO:194, SEQ ID NO:195, SEQ ID NO:196, SEQ ID NO:197, SEQ ID NO:198, SEQ ID NO:199, SEQ ID NO:200, SEQ ID NO:201, SEQ ID NO:202, SEQ ID NO:203, SEQ ID NO:204, SEQ ID NO:205, SEQ ID NO:206, SEQ ID NO:207, SEQ ID NO:208, SEQ ID NO:209, SEQ ID NO:210, SEQ ID NO:211, SEQ ID NO:212, SEQ ID NO:213, SEQ ID NO:214, SEQ ID NO:215, SEQ ID NO:216, SEQ ID NO:217, SEQ ID NO:218, SEQ ID NO:219, SEQ ID NO:220, SEQ ID NO:221, SEQ ID NO:222, SEQ ID NO:223, SEQ ID NO:224, SEQ ID NO:225, SEQ ID NO:226, SEQ ID NO:227, SEQ ID NO:228, SEQ ID NO:229, SEQ ID NO:230, SEQ ID NO:231, SEQ ID NO:232, SEQ ID NO:233, SEQ ID NO:234, SEQ ID NO:235,

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or a complement of said sequence.

3. An isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

4. An isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109,

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or to a complement of said sequence.

5. An isolated protein encoded by an isolated polynucleotide of claim 1.
6. An isolated protein encoded by an isolated polynucleotide of claim 2.
7. An isolated protein encoded by an isolated polynucleotide of claim 3.
8. An isolated protein encoded by an isolated polynucleotide of claim 4.

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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : C12N 15/12, 5/10, C07K 14/47, C12Q 1/68, A61K 38/17	A3	(11) International Publication Number: WO 98/45437 (43) International Publication Date: 15 October 1998 (15.10.98)
(21) International Application Number: PCT/US98/06956 (22) International Filing Date: 10 April 1998 (10.04.98) (30) Priority Data: 08/837,312 10 April 1997 (10.04.97) US (71) Applicant: GENETICS INSTITUTE, INC. [US/US]; 87 CambridgePark Drive, Cambridge, MA 02140 (US). (72) Inventors: JACOBS, Kenneth; 151 Beaumont Avenue, Newton, MA 02160 (US). MCCOY, John, M.; 56 Howard Street, Reading, MA 01867 (US). LAVALLIE, Edward, R.; 113 Ann Lee Road, Harvard, MA 01451 (US). RACIE, Lisa, A.; 124 School Street, Acton, MA 01720 (US). MERBERG, David; 2 Orchard Drive, Acton, MA 01720 (US). TREACY, Maurice; 93 Walcott Road, Chestnut Hill, MA 02167 (US). SPAULDING, Vikki; 11 Meadowbank Road, Billerica, MA 01821 (US). AGOSTINO, Michael, J.; 26 Wolcott Avenue, Andover, MA 01810 (US). (74) Agent: SPRUNGER, Suzanne, A.; Genetics Institute, Inc., 87 CambridgePark Drive, Cambridge, MA 02140 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 12 November 1998 (12.11.98)
(54) Title: SECRETED EXPRESSED SEQUENCE TAGS (sESTs) (57) Abstract Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.		

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 98/06956

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C12N15/12 C12N5/10 C07K14/47 C12Q1/68 A61K38/17

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C12N C07K C12Q A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 527 896 A (WIGLER MICHAEL H ET AL) 18 June 1996 SEQ ID no. 31, Accession no. 122491 ---	4
A	WO 97 07198 A (GENETICS INSTITUT) 27 February 1997 see the whole document ---	1-8
A	WO 97 04097 A (GENETICS INST) 6 February 1997 ---	1-8
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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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P document published prior to the international filing date but later than the priority date claimed

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Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

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Date of the actual completion of the international search

3 July 1998

Date of mailing of the international search report

30.09.98

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 98/06956

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 536 637 A (JACOBS KENNETH) 16 July 1996 cited in the application see the whole document ---	1-8
A	JACOBS K ET AL: "A NOVEL METHOD FOR ISOLATING EUKARYOTIC CDNA CLONES ENCODING SECRETED PROTEINS" JOURNAL OF CELLULAR BIOCHEMISTRY - SUPPLEMENT, vol. 21A, 10 March 1995, page 19 XP002027246 see abstract ---	1-8
A	WO 90 14432 A (GENETICS INST) 29 November 1990 see the whole document ---	1-8
A	WO 96 17925 A (IMMUNEX CORP) 13 June 1996 see the whole document -----	1-8

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 98/ 06956

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see further information sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

see further information sheet, subject 1.

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 98/06956

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